State of New Jersey

CHRIS CHRISTIE
Governor

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Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
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Bureau of Surface Water Permitting
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BOB MARTIN
Commissioner

October 9, 2015

Via Email
Mr. Daniel F. Becht, Esq., Executive Director
Jersey City MUA
555 RT 440
Jersey City, NJ 07305

Re: Final Surface Water Minor Modification Permit Action
Category: CSM - Combined Sewer Management
NJPDES Permit No. NJ0108723
JERSEY CITY MUN UTIL AUTH
Jersey City, Hudson County

Dear Mr. Becht:

Enclosed is a **final** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. This permit action serves to modify the renewal permit that was issued by the Department on March 12, 2015. This minor modification serves to correct some typographical errors, and clarify the CSO Submittal Summary. These changes and the affected portion of the permit are as follows:

1. Public Participation Submittal Requirements, CSM Part IV.D.3.b.iii.

Language is changed as follows with deletions shown as strikethrough and additions shown as underline:

b. The permittee shall develop an approvable LTCP that will include the Elements contained in Section G. The LTCP shall consist of the following steps and be submitted according to the schedule below…..

iii. Step 1b2 - In accordance with G.2., the permittee shall submit the Public Participation Process Report ~~Plan~~: within 36 months from the effective date of the permit (EDP).

1a. Public Participation Process, CSM Part IV.G.2.a and b.i

a. The permittee shall submit the Public Participation Process Report ~~Plan~~…

b. Implementation shall actively involve the affected public throughout….A Public Participation Process Report ~~Plan~~ shall include the following elements:

i. Conduct outreach to inform the affected/interested public (during the development of the permittee's LTCP) through various methods which may include ~~including~~: public meetings, direct mailers, billing inserts, newsletters, press releases to the media, postings of information on the permittee's website, hotline, development of advisory committees, etc.; and to

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Rationale for change: The Public Participation Plan (Parts IV D.3.b.iii, G. 2. a. & b.) has been renamed to Public Participation Process Report for consistency and to reflect the fact that it is not due until after the plan has been implemented. Additionally, the change to Part IV.G.2.b.i ensures that the permit language is consistent with the Response to Comment document in the March 12, 2015 final permit. Response to comment #32 of section D includes the excerpt as written above; however, the permit did not carry forward that intended language.

2. Evaluation of Alternatives, CSM Part IV.G.4.f

Language is changed as follows:

f. The "Presumption" Approach, in accordance with N.J.A.C 7:14A-11 Appendix C provides:…..

The permittee must demonstrate any ~~each~~ 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.

Rationale for change: This change ensures that the permit language is consistent with the CSO Control Policy as stated at N.J.A.C. 7:14A-11. Specifically, N.J.A.C. 7:14A-11 Appendix C describes the Presumption Approach as "A program that meets **any** of the criteria listed below would be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA…" (bold added)

3. Cost/Performance Consideration, CSM Part IV.G.5.a

Language is changed as follows with deletions shown as strikethrough and additions shown as underline:

a. The permittee shall submit in accordance with the submittal requirements at Sections D.3.a. and D.3.b.v., the cost/performance considerations that demonstrate the relationships among proposed control alternatives that correspond to those required in accordance with Section G.4…..

In accordance with Section G.1.a., the permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information, such as: ~~Include bulleted list of all applicable studies here~~

i. Jersey City MUA:

Jersey City Municipal Utilities Authority Cost and Performance Analysis Report, prepared by Malcolm Pirnie, Inc., dated April 2007.

Jersey City Municipal Utilities Authority CSO Long Term Control Plan, Cost and Performance Analysis Report, Volume 2, Technical Guidance Manual, prepared by Hatch Mott MacDonald, dated December 2006.

A complete list of studies performed by all CSO permittees in PVSC's hydraulically connected system is summarized in Appendix B at the end of this permit.

Rationale for change: The change to Part IV.G.5.a corrects a typographical error that was included in the March 12, 2015 final permit. The studies referenced in Part IV.G.5.a. of the January 17, 2014 Draft permit were inadvertently omitted in the March 12, 2015 final permit and are hereby being included as Part IV.G.5.a.i in this final permit modification.

4. Clarification of CSO Submittal Summary

The Department included a CSO Submittal Summary as an attachment to the cover letter for all NJPDES CSO permits. We have attached an updated version of the CSO Submittal Summary to include the actual dates; organized the items in chronological order; and corrected the discrepancy within the CSO Submittal Summary so that it is consistent with the requirements of CSM Part IV.

To illustrate the changes regarding the Emergency Plan and Public Participation, an excerpt of the CSO Submittal Summary is as follows with deletions shown as strikethrough and additions shown as underline:

Summary of Reports or Requirements that are to be Completed and Retained On-Site (i.e. not submitted to the Department)		
Permit Condition	**Abbreviated Description of Requirement**	**LTCP Due Date**
Part IV.D.3.b.iii	Submit Public Participation Process Report ~~Plan~~	
Part IV.D.4.b.iv	Update O&M Manual with SOPs, Asset Management Plan and Emergency Plan	~~EDP+12 months~~ July 1, 2016 and Annually thereafter
~~Part IV.F.1.l~~	~~Insert Emergency Plan in O&M Manual~~	~~EDP+6 months~~

Rationale for change: In addition to organizing the CSO Submittal Summary by due date (not permit section) the Public Participation Process Plan has been renamed to Public Participation Process Report for consistency and to reflect the fact that it is not due until after the plan has been implemented.

Also, the due date for updates to the O&M and Emergency Plan has been corrected to reflect the permit requirement at Part IV-CSM, section F.1.a. This section reads, in part: The permittee shall continue to update annually, an Operation & Maintenance (O&M) Program and corresponding Manual, including an Emergency Plan.

Please note that the Department continues to post a variety of resources on our website at http://www.state.nj.us/dep/dwq/cso.htm. The Progress Report Template; Quick Guide for CSO Discharge Monitoring Report (DMR) Form Submission; and Questions from External Team Meetings may be helpful tools in permit compliance.

Questions or comments regarding the final action should be addressed to Dwayne Kobesky via email at Dwayne.Kobesky@dep.nj.gov or phone at (609) 292-4860.

Sincerely,

Joseph Mannick

Joseph Mannick, Supervisor
Bureau of Surface Water Permitting

Enclosures

cc: Permit Distribution List
Masterfile #: 38217; PI #: 47745

CSO Submittal Summary

Summary of Reports Required to be Submitted to the Department		
Permit Condition	**Abbreviated Description of Requirement**	**59 Month LTCP Due Date**
Part III	Discharge Monitoring Reports (due 25th day of the month following the reporting period) - Solids/Floatables and Precipitation	Monthly from July 1, 2015
Part IV.D.4.a	Submit Progress Reports (due 25th day of the month following the quarter)	Quarterly from July 1, 2015
Part III	Discharge Monitoring Report (due 25th day of the month following the reporting period) – Duration of Discharge	Monthly from January 1, 2016
Part IV.D.2.a	Submit GPS latitude and longitude for pump stations, CSO regulators and CSO outfalls	January 1, 2016
Part IV.D.3.b.i	Submit System Characterization Work Plan	January 1, 2016
Part IV.D.3.c	Submit Baseline Compliance Monitoring Program Work Plan	January 1, 2016
Part IV.D.2.b	Submit a map of combined and separate sewer areas	July 1, 2016
Part IV.D.3.b.ii	Submit System Characterization Report	July 1, 2018
Part IV.D.3.b.iii	Submit Public Participation Process Report	July 1, 2018
Part IV.D.3.d	Submit Compliance Monitoring Program Report	July 1, 2018
Part IV.D.3.b.iv	Submit Consideration of Sensitive Areas Plan	July 1, 2018
Part IV.D.3.b.v	Submit Development and Evaluation of Alternatives Report	July 1, 2019
Part IV.D.3.b.vi	Submit Selection and Implementation of Alternatives Report in the Final LTCP	June 1, 2020

Summary of Reports or Requirements that are to be Completed and Retained On-Site (i.e. not submitted to the Department)		
Permit Condition	**Abbreviated Description of Requirement**	**59 Month LTCP Due Date**
Part IV.D.2.c	Install outfall signs	January 1, 2016
Part IV.F.1.f.	Update the characterization of the system's infrastructure (list of sewer system components and SIUs) using a spreadsheet	January 1, 2016
Part IV.F.1.h	Create anticipated schedule to revise Rules/Ordinances/Sewer Use Agreements to reduce I/I	January 1, 2016
Part IV.F.1.i and Part IV.D.4.b.iv	Insert SOPs in O&M Manual	January 1, 2016
Part IV.F.1.g	Insert characterization on a GIS Map	July 1, 2016
Part IV.F.8.c.iii	Create and maintain Telephone Hot Line or Website	July 1, 2016
Part IV.D.4.b.iv	Update O&M Manual with SOPs, Asset Management Plan and Emergency Plan	July 1, 2016 and Annually thereafter
Part IV.F.1.k	Insert and update an Asset Management Plan in O&M Manual	July 1, 2016 and Annually thereafter

Table of Contents

This permit package contains the following items with an explanation as to which changes were incorporated into the minor modification as compared to the March 12, 2015 final permit:

1. **Cover Letter – N/A**

2. **CSO Submittal Summary - MODIFIED**

3. **Table of Contents – N/A**

4. **Response to Comments - UNCHANGED**

5. **NJPDES Permit Authorization Page - MODIFIED**

6. **Part I – General Requirements: NJPDES - UNCHANGED**

7. **Part II – General Requirements: Discharge Categories - UNCHANGED**

8. **Part III – Limits and Monitoring Requirements - UNCHANGED**

9. **Part IV – Combined Sewer Management - MODIFIED**

10. **Appendix A: Design Standards for Storm Drain Inlets – UNCHANGED**

11. **Appendix B: List of Studies – PVSC and Hydraulically Connected Sewer Systems – UNCHANGED**

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

RESPONSE TO COMMENTS

Comments were received on the New Jersey Pollutant Discharge Elimination System (NJPDES) Draft Surface Water Permit Actions listed below:

The Camden County Municipal Utilities Authority (CCMUA) Sewage Treatment Plant (STP) (NJ0026182), the City of Camden (NJ0108812) and the City of Gloucester (NJ0108847) permits were issued Draft on April 12, 2013. The public notice was published in the *DEP Bulletin* on April 17, 2013. The 60 day public comment period began on April 18, 2013 when the public notice was published in the *Courier Post*. The New Jersey Department of Environmental Protection (the Department or NJDEP) held one public hearing at the CCMUA on May 21, 2013. The public comment period ended on June 17, 2013.

The Trenton Sewer Utility STP (NJ0020923) permit was issued Draft on June 24, 2013. The public notice was published in the *DEP Bulletin* on July 10, 2013. The 60 day public comment period began on June 27, 2013 when the public notice was published in *The Times* as well as in the DEP Bulletin. A public hearing was not held. The public comment period ended on September 8, 2013.

The Middlesex County Utilities Authority STP (MCUA -NJ0020141), the Joint Meeting of Union & Essex Counties STP (JMEUC - NJ0024741), the City of Elizabeth (NJ0108782) and the City of Perth Amboy (NJ0156132) permits were issued Draft on November 22, 2013. The public notice was published in the *Star Ledger* on November 27, 2013 and in the *DEP Bulletin* on December 4, 2013. The 60 day public comment period began on December 4, 2013. The Department held one public hearing at the Elizabeth City's Council Chamber on January 15, 2014. The public comment period ended on February 3, 2014.

The Bergen County Utilities Authority (BCUA) Little Ferry STP (NJ0020028), Hackensack City (NJ0108766), Ridgefield Park Village (NJ0109118), Fort Lee Borough (NJ0034517), the Town of Guttenberg (NJ0108715), North Bergen Woodcliff STP (NJ0029084), the North Hudson Sewerage Authority (NHSA) Adams Street STP (NJ0026085) and the NHSA River Road STP (NJ0025321) permits were issued Draft on December 20, 2013. The public notice was published in the *DEP Bulletin* on January 8, 2014. The 60 day public comment period began on December 27, 2013 when the Public Notice was published in the *Star Ledger*. The Department held one public hearing at the Hackensack City's Council Chamber on February 12, 2014. The public comment period ended on March 10, 2014 for the above mentioned facilities with the exception of the NHSA Adams Street STP, the NHSA River Road STP and the North Bergen Woodcliff STP.

Both the NHSA Adams Street STP and the NHSA River Road STP requested a 15 day extension to the public comment period via email on March 5, 2014. The Department granted the 15 day

extension to the public comment period via email on March 6, 2014. As a result, the public comment period for the NHSA Adams Street STP and the NHSA River Road STP ended on March 24, 2014.

The Department originally issued North Bergen Woodcliff STP's Draft permit on December 20, 2013. The Draft permit was emailed to the permittee and other interested parties on December 20, 2013, and was public noticed in the *Star Ledger* on December 27, 2013 and the *DEP Bulletin* on January 8, 2014. However, due to an administrative error, the Department did not mail a paper copy of the North Bergen Woodcliff STP Draft permit action to the permittee (see N.J.A.C. 7:14A-15.10). The Department then mailed a copy of the December 20, 2013 Draft permit on February 27, 2014 to the permittee and extended the public comment period for this permit action only, for 60 days. Notice of the extension of the public comment period for North Bergen Woodcliff STP appeared in the *DEP Bulletin* on March 5, 2014. The extended 60 day public comment period for North Bergen Woodcliff STP began on March 25, 2014 when the public notice was published in the *Star Ledger*. The public comment period ended on May 23, 2014.

The Passaic Valley Sewer Commission STP (PVSC - NJ0021016), Bayonne City MUA (NJ0109240), Jersey City MUA (NJ0108723), City of Newark (NJ0108758), North Bergen MUA (NBMUA - NJ0108898), East Newark Borough (NJ0117846), Town of Harrison (NJ0108871), Town of Kearny (NJ0111244) and Paterson City (NJ0108880) permits were issued Draft on January 17, 2014. The public notice was published in the *DEP Bulletin* on January 22, 2014. The 60 day public comment period began on January 24, 2014 when the Public Notice was published in the *Star Ledger*. The Department held one public hearing at PVSC on March 12, 2014. PVSC requested a 60 day extension to the public comment period via a telephone call on March 4, 2014. The Department granted PVSC a 15 day extension to the public comment period via a telephone call on March 11, 2014. The City of Newark requested a 60 day extension to the public comment period via email on March 4, 2014. The Department granted the City of Newark a 15 day extension to the public comment period via email on March 20, 2014. Paterson City requested a 60 day extension to the public comment period via a letter on March 4, 2014. The Department granted Paterson City a 15 day extension to the public comment period via a letter on March 20, 2014. Bayonne City MUA requested a 15 day extension to the public comment period via email on March 10, 2014. The Department granted Bayonne City MUA a 15 day extension to the public comment period via email on March 11, 2014. The Town of Harrison requested a 60 day extension to the public comment period via a letter on March 10, 2014. The Department granted the Town of Harrison a 15 day extension to the public comment period via a letter on March 20, 2014. NBMUA requested a 60 day extension to the public comment period via a letter on March 11, 2014. The Department granted NBMUA a 15 day extension to the public comment period via a letter on March 20, 2014. The Town of Kearny requested a 60 day extension to the public comment period via email on March 11, 2014. The Department granted the Town of Kearny a 15 day extension to the public comment period via email on March 20, 2014. Jersey City MUA requested a 60 day extension to the public comment period via a letter on March 14, 2014. The Department granted Jersey City MUA a 15 day extension to the public comment period via a letter on March 20, 2014. East Newark Borough requested a 60 day extension to the public comment period via a letter on March 18,

2014. The Department granted East Newark Borough a 15 day extension to the public comment period via a letter on March 25, 2014. As a result, the public comment period was extended until April 8, 2014 for PVSC and all facilities located within PVSC's sewer service area.

During the public comment periods, the Department accepted written comments from numerous parties and individuals. The Department also accepted oral testimony as comments since the public hearings were recorded by a stenographer and transcribed. The administrative record is available for review and is on file at the offices of the Department, located at 401 East State Street, Trenton, New Jersey. It is available for inspection, by appointment, Monday through Friday, between 8:30 A.M. and 4:00 P.M. Appointment for inspection may be requested through the Open Public Records Act (OPRA) office. Details are available online at www.nj.gov/dep/opra, or by calling (609) 341-3121.

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 Department has summarized the written comments and public testimony received on the Draft NJPDES permits. Pursuant to N.J.A.C. 7:14A-15.16(a)3, the Department has addressed all comments that are relevant to the scope of the NJPDES permits. To the best extent practicable, the Department has grouped the comments according to the relevant portions of the permits as well as according to similar issues. The Department has identified the commenters by their respective commenter numbers. **If a person submitted written comments as well as testimony at the public hearing for multiple permits, then that person was assigned a separate comment number for each hearing and/or written submittal. The Department has provided responses to these comments as well as an explanation of any changes made to the Final permit.** A list of acronyms that are used throughout this document has been included at the end of this Response to Comments document. To highlight changes to specific language throughout this document, deletions are shown with strikethrough and additions are shown with underline.

The Department received oral and written testimony at four (4) public hearings and received extensive written comments during the public comment periods from the following person[s] as identified by the commenter numbers below:

Name/Affiliation/Date of Letter or Public Testimony

1. Christopher Len, Staff Attorney, Hackensack Riverkeeper & NY/NJ Baykeeper, provided public testimony at the public hearing held at the CCMUA, Camden, NJ, on 05/21/2013.
2. Fred Schindler, Superintendent, City of Gloucester, provided public testimony at the public hearing held at the CCMUA, Camden, NJ, on 05/21/2013.
3. Christopher Len, Staff Attorney, Hackensack Riverkeeper & NY/NJ Baykeeper, submitted written comments for Gloucester City (NJ0108847), CCMUA (NJ0026182), and Camden City (NJ0108812) in a letter dated 06/14/2013.
4. Lawrence Levine, Senior Attorney, Natural Resources Defense Council (NRDC), submitted written comments for Gloucester City (NJ0108847), CCMUA (NJ0026182), and Camden City (NJ0108812) in a letter dated 06/16/2013.

5. Kate Anderson, Chief, Clean Water Regulatory Branch, United States Environmental Protection Agency (EPA) - Region 2, submitted written comments for Gloucester City (NJ0108847), CCMUA (NJ0026182), and Camden City (NJ0108812) in a letter dated 06/17/2013.
6. Bridget M. McKenna, Chief Operating Officer, PVSC, submitted written comments for Gloucester City (NJ0108847), CCMUA (NJ0026182), and Camden City (NJ0108812) in a letter dated 06/14/2013.
7. Christopher Len, Staff Attorney, Hackensack Riverkeeper & NY/NJ Baykeeper, submitted written comments for Elizabeth City (NJ0108782), JMEUC (NJ0024741), MCUA(NJ0020141), and Perth Amboy City (NJ0156132) in a letter dated 01/28/2014.
8. Robert A. Curti, Principal Project Engineer, Hatch Mott MacDonald, representing Elizabeth City, provided public testimony at the public hearing held at Elizabeth City's Council Chamber, Elizabeth, NJ, on 01/15/2014.
9. Samuel T. McGhee, Executive Director, JMEUC, submitted written comments for JMEUC (NJ0024741) in a letter dated 01/31/2014.
10. Joseph Bonaccorso, CME Associates, speaking on behalf of JMEUC (NJ0024741), provided public testimony at the public hearing held at Elizabeth City's Council Chamber, Elizabeth, NJ, on 01/15/2014.
11. Kate Anderson, Chief, Clean Water Regulatory Branch, EPA - Region 2, submitted written comments for Elizabeth City (NJ0108782), JMEUC (NJ0024741), MCUA (NJ0020141), and Perth Amboy City (NJ0156132) in a letter dated 01/30/2014.
12. Robert A. Curti, Principal Project Engineer, Hatch Mott MacDonald, submitted written comments for Elizabeth City (NJ0108782) in a letter dated 01/31/2014.
13. Christopher Len, Staff Attorney, Hackensack Riverkeeper & NY/NJ Baykeeper, provided public testimony at the public hearing held at Elizabeth City's Council Chamber, Elizabeth, NJ, on 01/15/2014.
14. Luis A. Perez Jimenez, Director of Operations USA-PA, Inc., Vice President of Operations USA - Avalon, submitted written comments for Perth Amboy City (NJ0156132) in an email dated 01/31/2014.
15. Bridget M. McKenna, Chief Operating Officer, PVSC, submitted written comments for Elizabeth City (NJ0108782), JMEUC (NJ0024741), MCUA (NJ0020141), and Perth Amboy City (NJ0156132) in a letter dated 02/03/2014.
16. Lawrence Levine, Senior Attorney, NRDC, submitted written comments for Elizabeth City (NJ0108782) and Perth Amboy City (NJ0156132) in a letter dated 02/03/2013.
17. Barbara J. Koonz, Esq., Wilentz Goldman & Spitzer, submitted written comments for MCUA (NJ0020141) in a letter dated 02/10/2014.
18. Kate Anderson, Chief, Clean Water Regulatory Branch, EPA - Region 2, submitted written comments for BCUA Little Ferry STP NJ0020028), NHSA River Road STP (NJ0025321), NHSA Adams Street STP (NJ0026085), Fort Lee Borough (NJ0034517), Town of Guttenberg (NJ0108715), Hackensack City (NJ0108766), North Bergen MUA Woodcliff STP (NJ0029084) and Ridgefield Park Village (NJ0109118) in a letter dated 03/06/2014.
19. John S. Rolak, Senior Vice President, Hatch Mott MacDonald, submitted written comments for the Village of Ridgefield Park (NJ0109118) in a letter dated 03/06/2014.

20. Bridget M. McKenna, Chief Operating Officer, PVSC, submitted written comments for NHSA River Road STP (NJ0025321), NHSA Adams Street STP (NJ0026085), Fort Lee Borough (NJ0034517), Town of Guttenberg (NJ0108715), Hackensack City (NJ0108766), and Ridgefield Park Village (NJ0109118) in a letter dated 03/07/2014.
21. Eric Anderson, Chief Engineer/Director of Water Pollution Control Division, BCUA, submitted comments for BCUA Little Ferry STP (NJ0020028) in a letter dated 03/07/2014.
22. Christopher Len, Staff Attorney, Hackensack Riverkeeper & NY/NJ Baykeeper, submitted written comments for BCUA Little Ferry STP (NJ0020028), NHSA River Road STP (NJ0025321), NHSA Adams Street STP (NJ0026085), Fort Lee Borough (NJ0034517), Town of Guttenberg (NJ0108715), Hackensack City (NJ0108766), North Bergen MUA Woodcliff STP (NJ0029084) and Ridgefield Park Village (NJ0109118) in a letter dated 03/07/2014.
23. Stephen Shukaitis, Chairman, Clifton Environmental Commission, submitted written comments for Paterson City (NJ0108880) in a letter dated 03/07/2014.
24. Kate Anderson, Chief, Clean Water Regulatory Branch, EPA - Region 2, submitted written comments for PVSC (NJ0021016), Bayonne City (NJ0109240), East Newark Borough (NJ0117846), Town of Harrison (NJ0108871), Jersey City (NJ0109240), Newark City (NJ0108758), NBMUA (NJ0108898), Paterson City (NJ0108880), and Town of Kearny (NJ0111244) in a letter dated 03/21/2014.
25. Fredric J. Pocci, Authority Engineer, NHSA, submitted written comments for NHSA River Road STP (NJ0025321) and NHSA Adams Street STP (NJ0026085) in a letter dated 03/21/2014.
26. Stephen J. Gallo, Executive Director, Bayonne MUA submitted comments for Bayonne MUA (NJ0109240) in a letter dated 04/04/2014.
27. Uzo Ahiarakwe, PE, PLS, PP, CME City Engineer, Department of Development And Planning, City of Camden, provided submitted written comments for the City of Camden (NJ0108812) on 05/21/2013.
28. Gary M. Grey, Senior Wastewater Specialist, HDR, Inc., submitted comments for Borough of Fort Lee (NJ0034517) in a letter dated 03/14/2014.
29. Giselle Diaz, P.E., Boswell McClave Engineering, submitted comments for Town of Guttenberg (NJ0108715) in a letter dated 03/10/2014.
30. Daniel F. Becht, Esq., Executive Director, Jersey City MUA submitted comments for Jersey City MUA (NJ0108723) in a letter dated 3/14/2014.
31. Gary M. Grey, Senior Wastewater Specialist, HDR, Inc., submitted comments for Town of Kearny (NJ0111244) in a letter dated 04/04/2014.
32. Michael J. Neglia, P.E., P.P., P.L.S., Town Engineer, Town of Kearny, and Patrick Carberry, P.E.,Town Engineer, Town of Kearny, submitted comments for Town of Kearny (NJ0111244) in a letter dated 04/03/2014.
33. Raymond A. Ferrara, Ph.D., Vice-President and Principal, Kleinfelder, submitted written comments for NBMUA (NJ0108898) in a letter dated 04/08/2014.
34. Raymond A. Ferrara, Ph.D., Vice-President and Principal, Kleinfelder, submitted written comments for North Bergen MUA Woodcliff STP (NJ0029084) in a letter dated 05/22/2014.

35. Andrea Hall Adebowale, Acting Director, City of Newark, Department of Water and Sewer Utilities, submitted written comments for City of Newark (NJ0108758) in a letter dated 04/08/2014.
36. Lawrence Levine, Senior Attorney, NRDC, submitted written comments for Hackensack City (NJ00108766), NHSA Adams Street STP (NJ0026085), NHSA River Road STP (NJ0025321), Ridgefield Park (NJ0109118), Fort Lee Borough (NJ0034517), North Bergen Woodcliff STP (NJ0029084) and Town of Guttenberg (NJ0108715) in a letter dated 03/07/2014.
37. Lawrence Levine, Senior Attorney, NRDC, submitted comments for MCUA (NJ0020141) and JMEUC (NJ0024741) in a letter dated 02/03/2014.
38. Lawrence Levine, Senior Attorney, NRDC, submitted comments for Bayonne City MUA (NJ0109240), East Newark Borough (NJ0117846), Town of Harrison (NJ0108871), Paterson City (NJ0108880), City of Newark (NJ0108758), NBMUA (NJ0108898), Jersey City (NJ0108723), Town of Kearny (NJ0111244), and PVSC (NJ0021016) in a letter dated 04/08/2014.
39. Lawrence Levine, Senior Attorney, NRDC, submitted written comments for BCUA Little Ferry STP (NJ0020028) in a letter dated 03/07/2014.
40. Frederick J. Margron, P.E., City Engineer, City of Paterson, submitted written comments for City of Paterson (NJ0108880) in a letter dated 04/07/14.
41. Gregory Tramontozzi, representing PVSC, provided public testimony at the public hearing held at PVSC, Newark, NJ, on 03/12/2014.
42. Bridget M. McKenna, Chief Operating Officer, PVSC, submitted written comments for PVSC (NJ0021016), Bayonne City (NJ0109240), East Newark Borough (NJ0117846), Town of Harrison (NJ0108871), Jersey City (NJ0109240), Newark City (NJ0108758), NBMUA (NJ0108898), Paterson City (NJ0108880), and Town of Kearny (NJ0111244) in a letter dated 04/07/2014.
43. Christopher Len, Staff Attorney, Hackensack Riverkeeper & NY/NJ Baykeeper, submitted written comments for PVSC (NJ0021016), Bayonne City (NJ0109240), East Newark Borough (NJ0117846), Town of Harrison (NJ0108871), Jersey City (NJ0109240), City of Newark (NJ0108758), NBMUA (NJ0108898), Paterson City (NJ0108880), and Town of Kearny (NJ0111244) in a letter dated 04/07/2014.
44. Rocco Russomanno, Construction Official/Town Engineer, Town of Harrison, submitted comments for Town of Harrison (NJ0108871) in letter dated 04/08/14.
45. Bill Sheehan, Hackensack Riverkeeper, provided public testimony at the public hearing held at the Hackensack Municipal Building, Hackensack, NJ, on 02/12/2014.
46. Christopher Len, Staff Attorney, Hackensack Riverkeeper & NY/NJ Baykeeper, provided public testimony at the public hearing held at the Hackensack Municipal Building, Hackensack, NJ, on 02/12/2014.
47. John Rolak, Senior Vice President, Hatch Mott MacDonald, representing the Village of Ridgefield Park, provided public testimony at the public hearing held at the Hackensack Municipal Building, Hackensack, NJ, on 02/12/2014.
48. Kevin Wynn, Hatch Mott MacDonald, representing NHSA, provided public testimony at the public hearing held at the Hackensack Municipal Building, Hackensack, NJ, on 02/12/2014.

49. Andrea Hall Adebowale, Acting Director, City of Newark, Department of Water and Sewer Utilities, provided public testimony at the public hearing held at PVSC, Newark, NJ, on 03/12/2014.

General Comments

1. COMMENT: We appreciate the efforts made by the Department in developing the updated Combined Sewer Overflow (CSO) permits, which are a major step forward in implementing the CSO control program in New Jersey. The EPA acknowledges the considerable progress the Department has made in developing and issuing Draft CSO permits. These permits are a major step forward in implementing the CSO control program in New Jersey. [5] [11] [18]

2. COMMENT: The permit is a well written document that, in general follows the guidance in the National CSO Policy, N.J.A.C. 7:14A-11 Appendix C, and various EPA CSO guidance documents. The CSO control planning process started with the issuance of the first permits in 1995 and was followed by the second round of CSO permits in 2004. [6]

3. COMMENT: My organizations welcome these new permits. We feel that with relatively minor changes they will represent a substantial milestone in Clean Water Act (CWA) compliance. [7]

4. COMMENT: I'm glad that the Department has issued this permit. It is clear that New Jersey put a lot of work into it. I am really hopeful, for the first time in a long time, about CSO regulation in New Jersey. [1]

5. COMMENT: Thank you for the progress represented within this permit. [1] [3]

6. COMMENT: This is a great permit. Almost perfect. [2]

7. COMMENT: Thank you for your work, vastly improving the quality of New Jersey's CSO regulation. We look forward to working with you and the permittees as we develop and implement Long Term Control Plan (LTCPs) and eventually attain relevant water quality standards (WQS). [43]

8. COMMENT: Thank you for replacing the general permit with this individual permit program. These permits will result in water quality improvement. [45]

9. COMMENT: We would welcome the opportunity to work with the Department to improve post-construction stormwater standards for both CSO and Municipal Separate Storm Sewer System (MS4) areas throughout the state. [4] [36]

10. COMMENT: It was interesting to hear about what Elizabeth, with JMEUC as partners, have been doing over the years and what they will do in the future. And I'm heartened to hear that we're all taking this process in such a positive light. It was my impression, and the impression

of experts, that New Jersey was one of the worst regulatory states for CSOs in the country, and now I think it's on its way to being one of the best. [13]

11. COMMENT: The City of Elizabeth appreciates the efforts and support of the Department and the New Jersey Environmental Infrastructure Trust (NJEIT) in permitting and funding the City of Elizabeth's projects. [8] [12]

12. COMMENT: These permits are an important step in the right direction. We ask the Department to retain the protections and requirements contained in the Draft permit as it finalizes and implements these permits. We encourage the Department and the permittees to proceed expeditiously to adopt and approve LTCPs according to the schedules proposed in the Draft permits.

We are also pleased that the Department has chosen to issue individual permits instead of its previous strategy of issuing statewide general permits for CSSs. [3] [7] [22] [34] [43]

13. COMMENT: National Resources Defense Council (NRDC) supports the Department's transition from a statewide general permit for CSOs to an individual permit system. [4] [16] [36] [37] [38] [39]

14. COMMENT: These permits are by and large very good. [46]

RESPONSE 1-14: The Department appreciates the commenters' support of the decision to issue individual NJPDES permits for all of the CSO permittees and the support of the Draft permit requirements. A significant amount of time and effort from the Department, as well as coordination and support from EPA Headquarters and EPA Region 2, has contributed to the issuance of these permits. The Department looks forward to the development and implementation of LTCPs to further advance the protection of our valuable water resources.

As detailed earlier, the NJPDES CSO permits were issued in groupings based on the receiving STP and their contributing municipalities. The Department has considered all comments in the development of the Final permits. Additionally, while there may be some individual differences between the NJPDES CSO permits, the components relative to compliance with the National CSO Policy and the development of LTCPs remain similar.

15. COMMENT: Our principal goal at the Hackensack Riverkeeper is to meet the stream goals and drinkable goals in the CWA. While unthinkable 20 years ago, today we have hundreds and hundreds of people every year that are kayaking, canoeing, and otherwise going out to enjoy the aquatic resources that the river offers. And we have always felt that it was in the public interest to get these CSOs fixed to protect those peoples' health. We're never going to get it fishable, swimmable, and drinkable until we fix these discharges and make them go away, and the LTCPs are the road to that success. [45]

16. COMMENT: Hackensack Riverkeeper operates two paddling centers on the Hackensack River. The number of people that visit and enjoy these paddling centers is ever expanding. By

seeing the recovery of this ecosystem, more and more people are wondering about their ability to fish, swim and wade in these waters. [46]

RESPONSE 15-16: The NJPDES CSO permits contain a comprehensive strategy that requires measures to ensure improvements to water quality, and that the LTCPs will be an integral component to these improvements. The Department applauds all efforts to enhance recreation to allow the enjoyment of our state's valuable water resources for the public and acknowledges the positive trend noted by the commenters. The Department believes that these improvements should serve to enhance the designated uses of the waterbodies which may lead to more and improved recreational opportunities.

17. COMMENT: On behalf of PVSC, they would like to thank the Department for the courtesies extended to PVSC; and to our municipal permittees as well. [41]

18. COMMENT: JMEUC appreciates the manner in which the Department has presented the Predraft permit, prior to publishing the Draft permit, and the time that the Department has taken to communicate to the permittees the issues contained therein in meetings and seminars. This is the kind of atmosphere that we've always hoped we could develop to become more productive. We also appreciate the extended time we've been given to review and comment on the complicated issues that are involved. [10]

19. COMMENT: I would like to thank the Department for its hard work in issuing this Draft permit, providing the Predraft permit, and in organizing this public hearing. [49]

RESPONSE 17-19: The Department appreciates the positive comments regarding the extra outreach efforts conducted. The Department believes the sharing of Predraft permits, subsequent "roll-out" meetings, extended public comment periods, and the public hearings, were valuable to many permittees.

20. COMMENT: The designated public comment period of 60 days was too short for the Town of Kearny to assess and offer comments on the number of important issues included in the Draft CSO Permit. To date, only a 15 day extension of time has been granted by the Department in limited instances. This time extension is inadequate. Similarly, PVSC requests that the public comment period be extended an additional 30 days. [32] [42]

RESPONSE 20: The Department does not agree that a 15 day extension of time to a 60 day public comment period, which is twice as long as the 30 days allotted for most permit actions under N.J.A.C. 7:14A-15.10, was inadequate to provide comments on the Draft permit. Given the complexity of the NJPDES CSO permits, the Department granted a 15 day extension to the original 60 day public comment period for PVSC and all facilities located within PVSC's sewer service area, including the Town of Kearny. This comment period was in addition to any time given to comment on the Predraft permit, as given to all NJPDES CSO permittees. It is also worth noting that the NJPDES CSO permits issued to PVSC and its service area on January 17, 2014 were the last set of NJPDES CSO permits to be issued, where the first set was issued to the Cities of Camden and Gloucester and CCMUA on April 12, 2013. With all of this information

that had been made available to the Town of Kearny, and the fact that all of the other CSO permittees had similar public comment periods, the Department believes that the Town of Kearny had more than adequate time to prepare and submit detailed comments on the Draft permit.

21. COMMENT: Thank you for coming to Hackensack to hold this hearing. I wish I had more advance notice on it because we might have seen a lot more people here. [45]

RESPONSE 21: The public notice for the BCUA public hearing was noticed in the *Star Ledger* on January 24, 2014 and the hearing was held on March 12, 2014. This amounts to 49 days of advance notice. The Department maintains that this was sufficient notice for anyone wanting to attend.

22. COMMENT: A number of requirements contained in the Draft permits are confusing and require further clarification to allow for the submission of comments. NHSA has included questions regarding the Draft permits' requirements on many issues. When NHSA receives the Department's response to these matters or updated data applicable to the facilities, NHSA intends to supplement these preliminary comments, if necessary. [25]

RESPONSE 22: The public comment period closed for the NHSA's Adams Street STP and River Road STP on March 24, 2014. Pursuant to N.J.A.C. 7:14A-15.13, comments received after the closing date of a public comment period are considered untimely. Based on a request from the Adams Street STP and the River Road STP, the Department granted a 15 day extension to the public comment period which extended the close of the comment period until March 24, 2014. As no data, information or argument submitted during the comment period raised significant legal and/or factual issues that were likely to affect the final decision on these permits, the Department did not further extend the comment period. See N.J.A.C. 7:14A-15.14. This Response to Comments document is intended to address the issues and questions raised by the permittees. The Department is willing to meet with NHSA to discuss compliance with the Final permit.

23. COMMENT: The Town of Guttenberg Draft permit is linked to the Draft North Bergen Woodcliff STP permit. In order for the Town of Guttenberg permit to be thoroughly reviewed, the comment period for the North Bergen Woodcliff STP permit should have been issued simultaneous with this permit; therefore, these review comments are subject to change dependent upon the review for the STP permit. [29]

RESPONSE 23: While the comment periods were not simultaneous, the permittees had an opportunity to comment on both permits. The Department has reviewed and responded to the comments submitted on both Draft permits.

24. COMMENT: Please define the term "hydraulically connected system" and describe how it applies to Kearny and Fort Lee. Kearny's dry weather flow is discharged to PVSC which discharges to the Upper NY Harbor and Upper Newark Bay; however, some of Kearny's CSO outfalls discharge to Franks Creek. Fort Lee's dry weather flow is discharged to the BCUA

which discharges to the Hackensack River; however, Fort Lee's CSO outfall discharges into the Hudson River. [28] [31]

RESPONSE 24: A "hydraulically connected system" as defined in the permit in Part IV – Notes and Definitions, is:

> "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."

As Kearny's flows are conveyed to PVSC, Kearny is part of the hydraulically connected system served by PVSC. As Fort Lee's flows are conveyed to BCUA, Fort Lee is part of the hydraulically connected system served by BCUA.

25. COMMENT: The National CSO Policy requires when different parts of a single combined sewer system (CSS) are operated by more than one authority, permits issued to each authority should generally require joint preparation and implementation of the National CSO Policy. Permittees should be required to coordinate system-wide implementation of the nine minimum controls (NMCs) and the development and implementation of the long-term CSO Control Plan. Paragraph c. of Section "D. Submittals 1. CSO Submittal Requirements" should be updated to include these requirements and Section "D Submittals 4. CSO Progress Report Submittal Requirements" should include requirements to report on the permittee's joint and separate responsibilities and progress in implementing the NMCs and in developing and implementing the LTCP. [11] [18]

RESPONSE 25: The CSO permits specifically address these requirements and require joint preparation and implementation of the National CSO Policy. Part IV.D.1.c of the permit states that "the permittee shall work cooperatively with all other appropriate municipalities/permittees in the hydraulically connected sewer system to ensure that the NMCs and LTCP activities are being developed and implemented consistently. The permittee shall identify their joint and separate responsibilities. . . regarding implementation of the NMCs and LTCPs." Part IV.D.4.b.ii requires permittees to report quarterly on "CSO control measures implemented by the permittee to comply with the NMCs." Part IV.D.4.b.iv requires permittees to report quarterly on "the manner in which all owners/operators of the hydraulically connected collection system participated in development of the LTCP."

26. COMMENT: All permits in the CSS should be cross-referenced for informational purposes. Alternatively, rather than issuing separate, cross-referenced individual permits, the Department should consider issuance of a single permit for the entire hydraulically connected system/publicly owned treatment works (POTW) with each municipality that contributes flows

to the hydraulically connected system (including both separate and combined systems) listed as a co-permittee. [11] [18]

27. COMMENT: Please omit or modify references to incorporating CSO requirements and the CSO Fact Sheet within the CSO Discharge Description of NJPDES permit (NJ0020141). MCUA does not own or operate any CSO outfalls. MCUA does not control the discharge of Perth Amboy City's CSO outfalls either directly or indirectly.

It is not consistent with the National CSO Policy and the Department is not authorized to legally bind MCUA to comply with CWA requirements of another entity by incorporating another facility's permit requirements into MCUA's permit where MCUA has no ownership, operation or control of the subject CSO. Federal guidance relied upon by the Department specifically recognizes that it cannot impose legally binding requirements and that the implementation of EPA's recommendations may not be applicable in specific circumstances. In this instance, MCUA requests reconsideration of the specific circumstances above and of the Department's legal authority to regulate under those circumstances.

MCUA is a regional wastewater collection and treatment agency, which owns and operates a sanitary wastewater treatment facility, several trunk sewer lines, meter chambers and pump stations that convey wastewater to its treatment facility. The MCUA does not own, operate or control any CSO facilities. Therefore, the entirety of Section 13 of the Fact Sheet is not applicable and should be removed. Perth Amboy has a separate permit for its CSO and is a separate owner and operator. Further, MCUA does not control the discharge or Perth Amboy's CSO directly or indirectly. This is a function of Perth Amboy's infrastructure. MCUA will coordinate with Perth Amboy's "Long Term Combined Sewer Overflow Control Plan" once finalized and will assist in evaluating proposed scenarios which may include MCUA accepting additional capacity from Perth Amboy during wet weather events. [17]

28. COMMENT: The statement included in Section 13 on page 28 of the Fact Sheet of MCUA's NJPDES permit NJ0020141 that MCUA indirectly controls the Perth Amboy CSO is false and must be corrected to read as follows:

> "Although Middlesex County Utilities Authority does not own and/or operate and/or control any CSO outfalls, ~~they indirectly control the discharge of Perth Amboy City's CSOs~~, consistent with National Policy, MCUA will review Draft LTCP's prepared by the City of Perth Amboy to determine the extent that the MCUA can maximize the treatment of additional wastewater at its existing Central Treatment Plant discharged by the City of Perth Amboy during and after a precipitation event."

Please refer to Perth Amboy City's individual NJPDES Discharge to Surface Water permit NJ0156132 for more detail regarding Perth Amboy City's CSOs.

Exhibit A is included as an attachment to the comments document. Exhibit A is correspondence prepared by R3M (engineering consultants to MCUA) which provides a Summary Description of Combined Systems within MCUA's service area which further demonstrates the independence

of the Perth Amboy CSO. Specifically, Exhibit A includes an evaluation of the capability of Perth Amboy's and MCUA's ability to handle additional CSO flow and to eliminate overflow from CSO outfalls entirely; the treatment required to achieve such; and the associated costs to do so. [17]

29. COMMENT: We agree with the Department's determination that STPs with upstream CSOs should be permitted so that they coordinate with CSO operators, but the role played by STPs, with or without their own outfalls, is quite different than CSO operators. STPs like PVSC need to improve operations within their plant to minimize CSOs, but they may serve an even more vital function as a coordinator between its customer municipalities, CSO and Sanitary Sewer Oveflows (SSOs) alike, to minimize overflows. It may be best to come up with a permit for STPs that more clearly lays out their coordinating responsibilities and does not include permit terms that don't apply to them. [43]

30. COMMENT: The majority of the permit requirements to develop an LTCP and attain the NMCs should apply only to the owner and operator of the actual CSO discharge locations. JMEUC does not possess any ownership or operational interest in any CSO or outfalls located within the limits of our system. Therefore, we are legally, technically and physically incapable of ensuring attainment with these requirements and compliance with such NJPDES permit provisions.

JMEUC possesses no authority to operate any component of the CSO system and cannot order or initiate any corrective measures in such areas. This is a critical requirement for National Pollutant Discharge Elimination System (NPDES) permit issuance as discussed in EPA's "Combined Sewer Overflow Guidance for Permit Writers" (USEPA 1995) at 2-8 to 2-9. That document very clearly indicates that for systems such as JMEUC's (i.e. the POTW does not "own or operate" the CSO outfalls or collection system), the permits should delineate specific responsibilities, based on ownership and require coordination to achieve LTCP objectives. This ensures that the permits properly specify who, when and where duties apply, in a manner consistent with the actual capability to carry out those responsibilities. [9]

31. COMMENT: Pursuant to applicable NPDES/NJPDES rules, only the owner or operator of a CSO discharge may receive a CSO NPDES permit under federal law. JMEUC meets neither of these descriptions. For this reason, and because compliance with the CSO components is not within the JMEUC's legal capabilities or charter, the permit must be Re-drafted to more precisely detail which entity is responsible for compliance with the NMCs and LTCP. Unless and until such division of responsibilities occurs, this permit should not be issued Final.

A significant number of issues require resolution and more definitive identification to have a proper and implementable NJPDES permit which will allow the LTCP to be completed in an orderly fashion. These issues include:

- Several NMCs and LTCP provisions address CSO and collection system operations and improvements that may need to be implemented. The Department should identify those actions that do not require any involvement by JMEUC as well as those for which

JMEUC lacks any legal authority to implement (i.e., Infiltration and Inflow (I/I) corrective measures by outlying communities).

- For those items that require JMEUC participation, who has the lead responsibility for completing items and submission requirements relating to specific compliance responsibilities under Permit Section IV (JMEUC vs. Elizabeth City)? For example, why does the Department indicate that JMEUC needs to demonstrate that CSO discharges comply with WQS or meet the NMCs? [9]

32. COMMENT: Throughout the permit there are requirements for monitoring, reporting, submissions, performance of evaluations and development of a CSO LTCP. JMEUC does not own or operate CSO outfalls or flow regulating devices that limit the combined sewage flow from Elizabeth City. The permit recognizes this to some degree by identifying certain requirements that will be the sole responsibility of Elizabeth City, as well as some requirements that will require a shared effort. While JMEUC is willing to work with Elizabeth City to develop the CSO LTCP, the Department must recognize that JMEUC has no legal authority to compel Elizabeth City to perform or complete any of the requirements referenced in this permit or their own permit. In consideration of this situation, JMEUC requests that there be text in its permit recognizing the limitations of its liability in the development of a CSO LTCP for the abatement of CSOs owned and operated by Elizabeth City. [9]

33. COMMENT: Although Newark owns and operates its CSS and owns the CSO outfalls from which CSOs may be discharged, PVSC owns and operates the majority of the CSO flow regulators through which the CSOs flow prior to discharge. Specifically, PVSC owns and operates the CSO flow regulators at Verona Avenue (002A), Herbert Place (004A), Fourth Avenue (008A), Clay Street (009A and 010A), Saybrook Place (014A), City Dock (015A), Jackson Street (016A), Polk Street (017A), and Freeman Street (018A). At each of these CSO flow regulators, PVSC's decision making and intentional action alone controls the mechanism by which excess flow is diverted away from its interceptor to discharge from the CSO outfall because of insufficient capacity in the interceptor or POTW, which can occur due to the volume of flow from upstream PVSC member municipalities into PVSC's interceptor. At times when these upstream communities experience rainfall, the PVSC interceptor capacity available to Newark may be vastly or completely diminished, leaving little alternative but to discharge CSOs from the above stated CSO outfalls. In addition, the CSO regulators located in PVSC's member municipalities upstream of Newark are not owned or controlled by the PVSC, which leaves no alternative than to overflow through the CSO regulators they do control which subsequently flow from the CSO outfall owned by Newark. The cumulative effect of the inflow and infiltration (I/I) from the separate sewer systems also contributes to the surcharging of the PVSC system.

Newark is aware of the complexity of this problem and stands ready to diligently work with PVSC and its member municipalities towards a solution as part of the forthcoming LTCP planning and implementation. As pertains to the permit, however, PVSC has previously indicated that, because it does not own the CSO outfalls, it cannot have any responsibility in its permit for any discharge from that outfall and for certain aspects of the LTCP or implementation. Although the combined sewage that may overflow from the CSO outfalls listed above may

originate from Newark's CSS, the decision to divert that flow to the CSO outfall lies entirely with PVSC and qualifies as an activity requiring a NJPDES permit under N.J.A.C. 7:14A. [35]

34. COMMENT: The Fact Sheet describes the dilemma of implementing CSO controls among satellite collection systems and the receiving STP by stating that "the Department requires that the permittee work cooperatively with the receiving STP." This "requirement" is stated several times throughout the permit and would seem to imply a compelling legal assumption. The Fact Sheet also states "Further, the Department strongly encourages the permittees to combine their resources to develop and submit a single LTCP on behalf of the permittees in the hydraulically connected combined sewer system." We request the Department revise any wording stating the permittees are "required" to work cooperatively to be changed to "strongly encouraged" to work together. As you know cooperative development of an LTCP among several permittees will be a complicated matter and require actions by permittees' elected officials and contractual or other legal agreements between participating parties. Also, for this approach to be effective, all hydraulically connected permittees would need to agree to cooperate in LTCP development. While we understand the advantages of developing a comprehensive CSO program among the satellite collections systems and the receiving STP, we are concerned that using the word "required", even in the Fact Sheet, may be construed by others to be intended to be a legally enforceable permit condition. [28] [31]

35. COMMENT: In the paragraph that begins with "Multiple municipalities/permittees own separate portions…," the Department states, "therefore, the Department requires that the permittee work cooperatively with the receiving STP and all other appropriate municipalities/permittees in the hydraulically connected combined sewer system to ensure that the data collected is used consistently in the development of the LTCP and can be documented to achieve overall water quality benefits."

The wording above does not appear in the National CSO Policy and PVSC recommends that it be replaced with:

> "When different parts of a single CSS are operated by more than one authority, permits issued to each authority should generally require joint preparation and implementation of the elements of this Policy and should specifically define the responsibilities and duties of each authority. Permittees should be required to coordinate system-wide implementation of the nine minimum controls and the development and implementation of the long-term CSO control plan." [42] [44]

36. COMMENT: The permit states that, "although PVSC does not own and/or operate any CSO outfalls, they indirectly control the discharge of the CSO outfalls in Bayonne, Jersey City, Newark, North Bergen, East Newark, Harrison, Kearny and Paterson." Bayonne, Jersey City and North Bergen pump their flows to PVSC via a force main directly to the PVSC STP. PVSC has no operational control over the flows delivered from these municipalities. Therefore, PVSC requests that this statement either be removed in its entirety or revised by removing the municipalities of Bayonne, Jersey City and North Bergen. [42]

37. COMMENT: JMEUC owns no CSO outfalls, and as such, is limited in its ability to comply with the NMCs. As JMEUC does not own or operate CSO outfalls, the requirements under Step 1 of the LTCP should be limited to development of the collection system model and associated coordination with Elizabeth City for this task. Under Steps 2 and 3 of the LTCP, JMEUC's requirements should be limited to assisting with the evaluation of CSO control alternatives for maximizing the flow to the STP. JMEUC will work with Elizabeth City to evaluate appropriate measures for capacity improvements to the STP and the portion of its collection system where Elizabeth City's force main connects (approximately 1100 feet upstream of the STP). JMEUC's requirements should also be limited to working with Elizabeth City on final selection of the CSO Control Alternatives, development of the implementation schedule, and preparation of the Selection and Implementation of Alternatives Report, as they relate to JMEUC facilities. Compliance monitoring should be limited to sharing of influent flow data and compliance with STP effluent parameters. The STP's wet weather operating plan would be updated to address any changes relating to the implementation of the CSO controls. [9]

38. COMMENT: JMEUC does not own or operate a regulator or other physical means of controlling the discharge of the Elizabeth City discharges through CSO outfalls. Elizabeth City discharges to the JMEUC collection system are currently limited by contract and the capacity of Elizabeth's Trenton Street pumping station. The text of this sentence should be revised to state the following: "Although Joint Meeting of Essex & Union Counties does not own and/or operate any CSO outfalls, they receive and treat combined wastewater from the Elizabeth City combined sewer system." [9]

39. COMMENT: Page 1 of the Fact Sheet states that the Department's purpose in issuing individual CSO permits is to "address the site-specific conditions of each of the permittees and to promote better coordination of a LTCP among all permittees contributing to the hydraulically connected system." This is a noteworthy objective; however, there are a number of revisions that are necessary in order for the CSO permit to achieve these goals.

The hydraulically connected system, in this instance NBMUA, includes all collection systems contributing to the PVSC STP. While the Department's goal is laudable, the issuance of individual CSO permits to only a limited number of entities within the hydraulically connected system does not allow achievement of the goal. [33] [34] [40]

40. COMMENT: The NBMUA does not own or operate the central area CSS. The NBMUA owns and operates nine CSO outfalls, regulators, pumping stations, and two interceptors (the Paterson Plank Road and the River Road interceptors). NBMUA does not own or operate the remaining components of the central area CSS in North Bergen. The collection system is owned and operated by the Township of North Bergen. As a result, many of the requirements in the permit address parts of the system for which the NBMUA has no ownership or operational responsibility. Therefore, NBMUA cannot comply with the requirements of the permit as it is presently drafted. [33]

41. COMMENT: The NBMUA owns and operates one CSO outfall and netting chamber, two regulators, and the River Road interceptor. NBMUA does not own or operate the remaining

components of this CSS in North Bergen. The collection system is owned and operated by the Township of North Bergen. As a result, many of the requirements in the permit address parts of the system for which the NBMUA has no ownership or operational responsibility. Therefore, NBMUA cannot comply with the requirements of the permit as it is presently drafted. [34]

42. COMMENT: Both Newark's and PVSC's permits must be revised so that the entities are co-permittees with respect to those CSO outfalls where PVSC owns and operates the CSO regulators. Newark cannot be held solely responsible for compliance with permit conditions or submittals when it is not solely responsible for determining when a CSO will occur. It is strongly requested that the permits for both Newark and PVSC establish that these two entities are co-permittees with respect to the above-referenced CSO outfalls. Meeting the requirements and/or obligations of the permit will require coordination between Newark and PVSC, and certain aspects of those requirements and/or obligations may only apply to one entity or the other, but, as it pertains to the above-referenced CSO outfalls, the permits for Newark and PVSC should both include the following responsibilities:

- CSO Monitoring (Part IV – Specific Requirements, Section A)
- CSO Recordkeeping (Part IV – Specific Requirements, Section B)
- CSO Reporting (Part IV – Specific Requirements, Section C)
- CSO Submittals (Part IV – Specific Requirements, Sections D.3 and D.4)
- CSO Facility Management (Part IV – Specific Requirements, Section E)
- CSO Nine Minimum Control Requirements (Part IV – Specific Requirements, Section F)
  - Public Notification to Ensure that the public Receives Adequate Notification of CSO Occurrences and CSO Impacts
- CSO LTCP Requirements (Part IV – Specific Requirements, Section G)
  - Characterization
  - Monitoring
  - Modeling
  - Identification / Consideration of Sensitive Areas
  - Public Participation
  - Evaluation of Alternatives
  - Compliance Monitoring Program [35]

RESPONSE 26-42:

STPs and CSO owners/operators are responsible to cooperate.

CSO permits are being issued both to the owners and operators of CSO outfalls and to the STPs that accept and treat flows from CSO communities, because both types of permittees have a role to play in planning and implementing the NMC and other measures required to reduce CSOs and both are required to submit and implement LTCPs in accordance with the National CSO Policy. The Department considered both individual permits and an aggregate permit for each CSS and chose to proceed with separate individual permits at this time. Consistent with EPA's "Guidance for Permit Writers" (EPA 832-B-95-008) dated August 1, 1995, Section 2.5, the

Department has issued individual permits to municipalities that own CSO outfalls and to the STPs that receive and treat combined sewer flows. Following EPA's guidance, each Fact Sheet for the 25 Draft permits cross-reference all other permits issued within the permittee's CSS.

While the Department agrees that some STP permittees do not own/operate any CSO outfalls, the manner in which the STP permittees operate and maintain the parts of the hydraulically connected system that they do own directly influences the volume, frequency and duration of the discharges from the CSO outfalls that are owned by the connected municipalities. This could include the operation and maintenance of the pump stations, regulators, and interceptors, as well as their own STPs. In that regard, as stated in Section 5.B of the Fact Sheet, the Department is requiring all municipalities that own/operate the actual CSO outfalls and all of the STPs that receive the resultant combined sewage (whether they own any CSO outfalls or not) to address all nine sections of the LTCPs.

The Department's regulations at N.J.A.C. 7:14A-22.1(b), the 1994 National CSO Control Policy, 59 Fed. Reg. 18688 (April 19, 1994) (National Policy), and the 1989 National CSO Control Strategy, 54 Fed. Reg. 37370 (Sept. 8, 1989) (National Strategy) all emphasize the necessity and responsibility of the STP to assume an integral role in development of LTCPs, whether or not it owns or operates a CSO outfall. Under the National CSO Policy, "[w]hen different parts of a single CSS are operated by more than one authority, permits issued to each authority should generally require joint preparation and implementation of the elements of this Policy and should specifically define the responsibilities and duties of each authority. Permittees should be required to coordinate system-wide implementation of the nine minimum controls and the development and implementation of the long-term CSO control plan." Part IV.A, 59 Fed. Reg. at 18695.

Planning and implementation of the LTCP elements and the NMCs cannot be done piecemeal where each permittee is only responsible for considering the portion of the system that the permittee owns, as the commenters imply. Without coordination lead by the STP and the cooperation of all CSO permittees, the fragmentary efforts of the CSO outfall owners cannot be expected to account for the cumulative cause and effect of CSO events.

The Department notes in Section 5.B of the Fact Sheet that it encourages the municipalities and the STPs to jointly prepare and submit a single LTCP for the entire hydraulically connected system. Alternatively, the CSO permittees can submit separate LTCP documents, but, if more than one LTCP is to be submitted for a single hydraulically connected system, the LTCP documents must be consistent with each other (i.e. based on the same data, modeling etc., where appropriate). Accordingly, Part IV Section D requires submittal of progress reports that detail and document compliance with the continued implementation of the NMCs and the manner in which all owner/operators of the hydraulically connected collection system participated in the development of the LTCPs. All of the LTCP requirements have been included in each CSO permit (Part IV Section G) to ensure that the permittees address all sections of the LTCP requirement either directly through their own actions, or by cooperating with the other hydraulically connected permittees.

The National CSO Policy does not direct permit administrators to issue CSO permits to member communities within a CSS that neither own nor operate a CSO or STP. However, as described below, sewerage authorities and municipal and county utility authorities have broad powers under New Jersey law to regulate the manner of use of the sewer system and to act to prevent member communities from causing or contributing to water pollution, including CSOs, even if those member communities are not directly subject to a CSO NJPDES permit.

The responsibilities for implementation of the approved plans will be allocated among the permittees in future permit actions, as discussed below. Until LTCPs are developed, reviewed, and approved, the CSO permits necessarily cannot define responsibilities except in a generic manner. The following section has been added to Part IV, Section G of the Final permits to clarify the permittees' respective responsibilities for preparation of the LTCP:

"10. Permittee's LTCP Responsibilities

a. The permittee is responsible for submitting an LTCP that addresses all nine elements in Part IV.G.

   Where multiple permittees own/operate different portions of a hydraulically connected CSS, the permittee is required to work cooperatively with all other permittees to ensure the LTCPs are consistent. The LTCP documents must be based on the same data, characterization, models, engineering and cost studies, and other information, where appropriate. Each permittee is required to prepare the necessary information for the portion of the hydraulically connected system that the permittee owns/operates and provide this information to the other permittees within the hydraulically connected system in a timely manner for LTCP submission."

The permittee is responsible for submitting a LTCP that addresses all nine elements in Part IV.G irrespective of whether the permittee owns/operates the relevant CSS infrastructure. Where multiple permittees own/operate different portions of hydraulically connected CSSs, the permittee is required to work cooperatively with all other permittees in the hydraulically connected CSS to ensure the LTCPs are developed using compatible engineering and cost studies, characterization, models, and other appropriate data. See 59 Fed. Reg. at 18695. Therefore, where the permittee does not own/operate the relevant CSS infrastructure, the permittee that does own and/or operate the relevant infrastructure is required to prepare and provide the necessary information and cooperate with the permittees that do not own and/or operate the relevant infrastructure to timely complete development of the permittees' LTCPs.

Responsibility of Sewage Treatment Facilities for implementation of the Nine Minimum Controls

STPs that do not own/operate any CSO outfalls are not required to implement all of the nine minimum controls. Specifically, STPs that do not own/operate any CSO outfalls are not required to comply with #6, *Control of Solid and Floatable Materials in CSOs*, #8, *Public Notification of CSO Occurrences and Impacts*, and #9, *Monitoring to Effectively Characterize*

CSO Impacts and the Efficacy of CSO Controls. The CSO permits issued to the STPs that do not own/operate CSO outfalls appropriately state in Part IV that these NMCs do not apply.

The remaining minimum controls clearly apply to the STPs and to the entire CSS of which the STP is an integral part and are therefore appropriately included in the STP permits. Although the STP may not be singly responsible for compliance with, for example, the requirement of proper operation and regular maintenance for the entire CSS and all CSOs, the STP is directly responsible for those portions of the CSS that it owns and/or operates.

Permits need not delineate specific responsibilities to implement the LTCP objectives.

Many of the above comments conflate the requirement that permittees cooperate in the "preparation" of an LTCP with the obligation to "implement" all parts of the LTCP after it is adopted. The National CSO Policy explains that the required control measures and implementation schedule, as appropriate, of the approved LTCPs will become the basis for NPDES individual permit requirements. Part II.C.4, 59 Fed. Reg. at 18692. Therefore, subsequent individual permit requirements will reflect the respective responsibilities of the permittees for activities as identified in any approved LTCP.

Permittees are first required to develop LTCPs for submission to the Department. The key element for compliance with this step is joint participation by all permittees to develop a plan that satisfies all of the LTCP elements. This may be accomplished through the submission of a single LTCP (the Department's preference), or through submission of separate LTCPs by each member of the CSS, so long as all of the separate LTCPs reflect at their core a coordinated approach that will ensure compliance with all of the LTCP elements.

STPs have legal authority to compel compliance by their member communities

The LTCP development process is intended to be an opportunity for the CSO communities and the STPs to work cooperatively towards a common goal.

The need for STPs to address inadequate steps by member communities is clear. Poorly performing satellite collection systems, such as those with poor maintenance and high levels of I/I, "can be major contributors to peak flow problems in regional collection systems" owned by STPs, and may be "a significant source of capacity problems downstream." NPDES Permit Requirements for Municipal Sanitary Sewer Collection Systems, 75 Fed. Reg. 30395, 30400 (June 1, 2010). Without addressing the source of excess flow from member communities, either cooperatively through the LTCP development process, or through enforcement of existing bylaws, rules, sewer use agreements, and statutory authority, STPs may be challenged to meet their own obligations to enable as much wet weather flow as possible to reach the STP (NMC #4).

STPs have broad authority within the powers granted by the Sewerage Authorities Law, N.J.S.A. 40:14A-1 et seq., the Municipal and County Utilities Authorities Law, N.J.S.A. 40:14B-1 et seq., and their respective enabling acts, and under the Water Pollution Control Act (WPCA), N.J.S.A.

58:10A-1 et seq., to act to prevent untreated discharges within their service areas and to require commitments by their member communities to develop and implement maintenance programs for their own systems as a condition of the sewer use agreements between the authority and its members. The overarching purpose for creating these sewerage and utility authorities under these laws is to prevent water pollution by providing for a centralized collection, treatment, and disposal system funded through member assessments and subject to the enforcement power of the authority. N.J.S.A. 40:14A-2(1), (3); N.J.S.A. 40:14A-23; N.J.S.A. 40:14B-2; N.J.S.A. 40:14B-19(a)(2). Once a sewerage system is built, the authority is empowered to direct member communities within its district to connect to "at such point and in such manner as the sewerage authority may specify." N.J.S.A. 40:14A-26(c); N.J.S.A. 40:14B-55. Conditions for use of the sewerage system are implemented through contracts and use agreements between the authority and its member communities (N.J.S.A. 40:14A-23; N.J.S.A. 40:14B-49), as well as through bylaws, rules, and regulations adopted by the authority (N.J.S.A. 40:14A-7(11); N.J.S.A. 40:14B-40).

Once connected, the member community "shall thereafter cause said sewer or drain to discharge into the sewerage system" of the authority. N.J.S.A. 40:14A-26(c); N.J.S.A. 40:14B-55. Thus, under the statute, member communities must prevent their own systems from malfunctioning, leaking, or overflowing and ensure that all flow reaches the authority's sewerage system. To enforce this requirement, authorities are given the ability to "enter upon" any portion of the hydraulically connected system within the authority's district, and to "close off and seal outlets and outfalls therefrom," within its discretion. N.J.S.A. 40:14A-25(a); N.J.S.A. 40:14B-51.

In turn, the authority is directed to provide "facilities reasonably sufficient in its opinion for the treatment and disposal of sewage" within its district. N.J.S.A. 40:14A-28(a); N.J.S.A. 40:14B-60(a). The authority shall not "suffer to be discharged" into its system "any matter or thing which is or may be injurious or deleterious . . . to its efficient operation," N.J.S.A. 40:14A-28(b); N.J.S.A. 40:14B-60(b). Authorities are empowered to take legal action against offending member communities. N.J.S.A. 40:14A-28(c); N.J.S.A. 40:14B-60.

Local agencies also have broad powers under the WPCA to ensure compliance with State and federal water pollution control regulations. The WPCA authorizes sewage utilities to "exercise the same right of entry, inspection, sampling, and copying, and to impose the same remedies" available to the Department to enforce state and federal pollution control requirements against all those who contribute flow to the local agency's treatment works. N.J.S.A. 58:10A-6(i). Under this statutory authority, for instance, utilities can require proper Operation and Maintenance (O&M) of conveyance systems by their member communities, including those without CSO permits, and enforce measures to reduce I/I in portions of the hydraulically connected system not owned or operated by the utility.

Development of the LTCP is an opportunity for STPs to develop or revise agreements with their member communities to address maintenance throughout the hydraulically connected system to minimize I/I, which the STPs are both empowered and obligated to do under existing statutes.

With regard to the request for co-permittees, the Department did consider this approach for this round of individual NJPDES CSO permits but chose to proceed with separate individual permits at this time.

As discussed in RESPONSE 10-13 in Section D of the Response to Comments document, this change affects Part IV.G.10 for the Final permits with the exception of NHSA-River Road STP (NJ0025321) and NHSA-Adams Street STP (NJ0026085) and Trenton SU STP (NJ0020923) who own the STP and CSO outfalls.

No additional changes have been made to the permit as a result of these comments.

43. COMMENT: Consistent with the National CSO Policy, MCUA will review the draft LTCP's prepared by the City of Perth Amboy to determine the extent that the MCUA can maximize the treatment of additional wastewater at its Central Treatment Plant discharged by the City of Perth Amboy during and after a precipitation event. The MCUA will continue to implement its current I/I Reduction Program that identifies which of its participants' meter chambers exhibit excessive I/I during precipitation events and will continue to monitor its participants' efforts to identify and reduce excessive I/I entering their respective wastewater collection systems. [17]

RESPONSE 43: The Department recognizes MCUA's continuing efforts to meter I/I and looks forward to increased controls as MCUA develops and implements an approvable LTCP addressing all 9 required elements within their hydraulically connected system. However, please note as detailed in **RESPONSE 26-42** of Section A of this Response to Comments document that both MCUA and Perth Amboy are required to jointly cooperate in the preparation of a single or separate LTCPs. If separate LTCPs are prepared, they must nonetheless reflect a coordinated approach to address all elements of the National CSO Policy to allow seamless implementation of both LTCPs. Please refer to Part IV.G.10 of the Final permits.

44. COMMENT: NBMUA and the Town of Guttenberg intend to work together toward a comprehensive LTCP for the CSSs in the entire Woodcliff Area. [34]

RESPONSE 44: The Department acknowledges that the NBMUA and the Town of Guttenberg have already agreed to work together to prepare one comprehensive LTCP, and have revised the submission schedule in the final permits. Please refer to the CSO Submittal Summary for compliance dates.

45. COMMENT: It is not possible to perform meaningful LTCP for the entire system when significant components of the system are not subject to the CSO permit requirements. Even a proper system characterization will be compromised by lack of participation. Asset characterization and management, for example, may not occur in parts of the system that are not subject to the CSO permit requirements. In fact, such entities have no requirement or incentive to even provide access to assess the condition and function of its components. When it comes to the development and evaluation of CSO control alternatives, the situation becomes even worse. Major components of the hydraulically connected system, such as entire collection systems, will not be regulated by the CSO permit. Alternatives that involve changes to system components

that are not regulated by the CSO permit must either be excluded from consideration, or control plans that affect those components may not be implemented. It is not possible to optimize CSO control plans when major parts of the system are left out of the puzzle.

The Department seeks to require long term CSO control planning for entire hydraulically connected systems, but is proposing to impose requirements only on those portions of the system that happen to have overflow points. This regulatory paradigm is flawed and will not achieve its ambitions. [33] [34]

46. COMMENT: As evidenced by language throughout the Draft permit, the Department understands that the PVSC STP and the "hydraulically connected municipalities" all impact one another, and that LTCP needs to be performed cooperatively in order to yield meaningful results. However, the proposed issuance of individual CSO permits to only the entities that own and operate CSO outfalls places the entire burden on only a limited number of entities within the hydraulically connected system. Many of the owners and operators of vital parts of the hydraulically connected system are not being regulated under the proposed CSO permits, because they do not happen to own or operate a CSO. The proposed CSO permits would result in an LTCP that either (a) cannot be implemented, or (b) will result in an inefficient control strategy that can only be implemented by the permitted entities. Examples of critical components of the hydraulically connected system that would not be permitted under the draft CSO permits include the following.

- The collection system within NBMUA is owned and operated by North Bergen Township, which does not own or operate any CSO outfalls and will therefore not receive a CSO permit. There are other CSSs within the hydraulically connected system that, like North Bergen Township, do not own or operate CSO outfalls. These systems contribute to CSOs, but will not be subject to the CSO permit because they lack a CSO outfall.

- Communities with separated storm and sanitary sewer systems, but which send wastewater through combined systems to the PVSC STP, are part of the hydraulically connected system. I/I from these parts of the system contribute to CSOs; however, these communities will not receive a CSO permit and therefore will not be subject to any of its requirements. [33]

47. COMMENT: New Jersey is unique in the way wastewater collection and treatment are separated into municipal collection systems and separate wastewater treatment agencies. Within the same hydraulically connected system there are combined sewer municipalities, separately sewered municipalities, and POTW agencies. The CSO municipalities and POTW agencies have NJPDES permits which govern their O&M requirements. Separately sewered communities, which also have O&M requirements, do not have permits or other control mechanisms. Without such mechanisms, reduction of I/I to allow more flow from CSOs to reach the STP are impossible to mandate. The same problem in Alleghany County Sanitary Authority, Pennsylvania (ALCOSAN) was solved by the county health department taking action against the separately sewered communities as part of a watershed based CSO control plan. We urge the State to examine this problem and conceive of a solution that will have all

municipalities in a hydraulically connected system participate in a comprehensive watershed-based LTCP. [6]

RESPONSE 45-47: Federal and state CSO regulations limit the issuance of CSO permits to CSO owners and their STPs. See the National CSO Policy, 59 Fed. Reg. at 18695; N.J.A.C. 7:14A-11 (Appendix C). The STP owners/operators should explore alternatives for minimizing CSOs by improvements throughout their systems, including in hydraulically connected separate sewer communities. Please refer to **RESPONSE 26-42** of Section A of this Response to Comments document for a discussion of the legal framework for regulation of sewer use by member communities.

CSO permittees including STP owners/operators have authority under enabling legislation, as discussed in **RESPONSE 26-42** of Section A of this Response to Comments document, the WPCA, local agency rules and regulations, local ordinances, and sewer use agreements to negotiate with both combined and separate sewer communities within the STP's service area to implement LTCP mechanisms. The Department asserts that an integrated effort, both from entities that have CSSs and adjacent entities, with separate sewer systems (who have not been issued NJPDES permits) is necessary to most efficiently and effectively address I/I and CSO discharges. In order to support a coordinated effort, the permit, in Part IV, under the first of the Nine Minimum Controls – Proper Operation and Maintenance, requires the CSO permittees to submit a schedule to review and revise, if necessary, its rules, ordinances and sewer use agreements with all of its customer municipalities to require those municipalities to operate and maintain their treatment works, identify I/I and reduce it where appropriate, and identify and eliminate interconnections and cross-connections in its storm sewers. Permittees may also consider whether any potential control measures benefit users beyond the CSS, and thus could potentially be financed through a broader user base.

The permit also requires the CSO permittees to submit a Public Participation Plan and invite members of the affected public, which should include all rate payers in the entire system, including the municipalities, home owners, business owners, and any other customers in the separate sewer system. See Part IV.G.2. of the permits. These are minimum requirements and the Department anticipates that many of the CSO control measures will involve improvements in the separately sewered areas/municipalities.

48. COMMENT: Will all adjacent municipalities that are hydraulically connected to the City of Elizabeth CSS be identified as permittees in the Final permit? The adjacent hydraulically connected entities include the Borough of Roselle, Borough of Roselle Park, City of Linden, City of Newark, Township of Hillside, Township of Union, Union County, New Jersey Department of Transportation (NJDOT), New Jersey Transportation Planning Authority (NJTPA), New Jersey Transit, Amtrak, Conrail, and the Port Authority of New York and New Jersey. [8] [12]

RESPONSE 48: As stated previously in **RESPONSE 45-47**, the Department is currently issuing CSO permits to CSO outfall owner/operators and to the owner/operators of the receiving STPs.

49. COMMENT: The Department should condition the renewal of the City of Paterson's CSO permit on Paterson's development of measures to mitigate the adverse water quality impacts to the Passaic River. In the short-term, Paterson should install solids/floatables (S/F) removal equipment on all 23 CSO outfall locations. In addition, the City of Paterson should be encouraged to explore long-term plans and grant applications to permanently separate its entire storm sewer and sanitary sewer systems for their benefit as well as for neighboring communities. [23]

RESPONSE 49: The Department acknowledges and appreciates the City of Clifton's concerns regarding the impacts from the CSO discharges from the City of Paterson. The City of Paterson's existing permit authorization and this renewal permit requires it to meet all of the NMCs, which includes the S/F requirements. The City of Paterson eliminated nine CSO outfalls, has installed the S/F controls on 19 of the remaining 23 outfalls. The City of Paterson is required by an Administrative Consent Order (ACO) to complete the remaining S/F controls. The Department is working closely with the City of Paterson to ensure that S/F controls will be installed at these remaining outfalls. The Department agrees that the City of Paterson should continue to actively evaluate alternatives to their CSOs.

50. COMMENT: The Department should require the permittees to develop an approvable plan by the deadlines imposed in the permit, and should then require the permittee to implement the plan promptly. [1] [3]

RESPONSE 50: The Department has included submittal deadlines for preparation of LTCPs and will require implementation according to the schedule incorporated into the approved LTCP.

51. COMMENT: Delete the LTCP requirements section which attempts to paraphrase the LTCP Requirements and replace it with "Produce a Long Term Control Plan in accordance with §402q of the CWA, (National CSO Policy) guided by EPA 832-B-95-002 "Combined Sewer Overflows, Guidance for Long Term Control Plan." The Permit language leaves out significant flexibility provided by the Guidance, and makes no mention of "CSO Policy III. Coordination with State Water Quality Standards" an important part of CSO planning and regulation. [20] [29] [32] [33] [34] [35] [40] [42] [44]

RESPONSE 51: One purpose of the NPDES/NJPDES permit program is to translate the statutory and/or regulatory requirements into specific permit conditions. The Department is directed to use its best professional judgment to determine what measures should be implemented in New Jersey to reduce or eliminate CSOs. The intent of the LTCP section within the Fact Sheet and the permit is to describe a framework for development of LTCPs that will meet the technology-based and water quality-based requirements of the CWA. The Department recognizes that the LTCP can be complex based on site-specific factors and the Department encourages the use of the EPA guidance documents referenced in this comment as well as in relevant guidance documents listed in Part IV of the NJPDES CSO permit. The Department disagrees that this section should be deleted and maintains that it serves to help translate complex regulatory requirements into a manageable framework for compliance.

Regarding coordination with WQS, the Fact Sheet does reference this key principle. Additional information is included in **RESPONSE 70** of Section A of the Response to Comments document.

52. COMMENT: Section G should make reference to the publication Combined Sewer Overflows – Guidance for Long Term Control Plans EPA/832-B-95-002 which provides more detailed guidance on LTCP development and content. [28] [31]

RESPONSE 52: The Draft permits refer to this guidance document in the Fact Sheets and in the Notes and Definitions section of Part IV of the permit, under Notes, item A.2.d. Additional reference in Part IV Section G is not necessary.

53. COMMENT: This permit represents a critically important crossroad between municipal government, planning, infrastructure, and environmental goals of the entire region. The scope of this undertaking is to going to affect Newark and other CSO communities for the next 20 to 30 years. The magnitude of the financial impact that the requirements of this permit may potentially have on Newark is severe, and that burden is going to be borne entirely by the Newark residents, many of whom who are already under difficult financial constraints. We hope that the Department will keep these practical and economical concerns in mind as we move forward with this larger process. The cost effort that will be required to achieve the intended goals and requirements of the permit will require a very high level of cooperation between the Department and its permittees.

The City of Newark has completed many projects to date at a great cost. Newark will continue in its efforts and commitment to satisfy the goals of the CSO control policy and this permit. Most citizens are unaware of CSOs and their impact on the environment. It will take an ongoing and herculean effort to inform the citizens and garner their support for the ongoing effort and funding necessary to address the CSO challenges. This change in the paradigm will be a major challenge. [49]

RESPONSE 53: The Department acknowledges and appreciates the ongoing efforts that the City of Newark has expended with respect to the National CSO Policy. The Department acknowledges that some alternatives will be costly and will work with the City of Newark to the best of its ability. Cost and affordability are factors that the National CSO Policy directs permittees and permitting authorities to consider in the process of preparing, approving, and implementing long-term CSO controls. The Department refers all permittees to EPA's "Guidance for Long Term Control Plan" (EPA 832-B-95-002) Sections 3.3.7 (Cost/Performance Considerations) and 3.4 (Evaluation of Alternatives for CSO Control) published August 1, 1995, EPA's "Guidance for Funding Options" (EPA 832-B-95-007) published August 1, 1995, and EPA's "Guidance for Financial Capability Assessment and Schedule Development" (EPA 832-B-97-004) published February 1, 1997, for detailed guidance on how to incorporate cost and affordability into the evaluation and choice of CSO control alternatives. Additional guidance is also available through EPA's "Financial Capability Assessment Framework" (FCA Framework) (see http://water.epa.gov/polwaste/npdes/cso/upload/municipal_fca_framework.pdf).

54. COMMENT: JMEUC does not own or operate any CSO outfalls. The complex issues and the coordination that's going to be required will rest on the goodwill that the City of Elizabeth and the JMEUC have built up. JMEUC has consistently met its permit requirements and historically acted in a proactive fashion in its role as a steward of the environment. We know the Department is aware of the magnitude and the complexity of the financial impact that these requirements are going to have on the treatment facility and the City of Elizabeth. That burden is going to be entirely borne by the taxpayers over a period of 25 to 30 years. We hope that the Department will be open to ideas to help solve the problems as they are seen in reality. JMEUC expects to continue to cooperate with the City of Elizabeth and the Department to achieve the intent of the permit requirements. We want to be able to address the concerns that are related to the CSO issues to reach the intended environmental goals. [10]

RESPONSE 54: The Department appreciates the cooperation and coordination between JMEUC and the City of Elizabeth thus far. The Department requires that JMEUC and the City of Elizabeth continue to proceed in a cooperative manner which is particularly critical in the preparation of an LTCP. While the Department recognizes that there will be a financial impact, coordination and joint preparation of an LTCP will avoid duplication of effort, be a more efficient use of time and resources, and result in reduced individual costs. See **RESPONSE 53** above for additional information.

55. COMMENT: How is a watershed solution going to be implemented? The City of Elizabeth has no regulatory or financial impact on other cities, but by the time the river enters the City of Elizabeth's boundaries it already does not meet WQS. How will you address the overall watershed solution and how will that impact the City of Elizabeth? [8]

56. COMMENT: The City of Elizabeth has difficulties because it is at the bottom of the river where the receiving water is already below standards and that is unfair. The best way to handle this is through total maximum daily loads (TMDLs), where you segment the pollution load that can meet WQS on that river and divide it up amongst the permittees. The Department needs to revisit this idea required by the CWA that TMDLs are the way to accomplish this. [13]

RESPONSE 55-56: Point and nonpoint source loadings within a watershed are often determined through TMDLs; however, the Department does not agree that it is appropriate to proceed with the development of a TMDL at this time as discussed in detail in **RESPONSE 64-67** of Section A of this Response to Comments document. The Department maintains that the comprehensive and holistic approach as required by the NJPDES CSO permits is the best manner in which to proceed. This includes development of LTCPs where the Department strongly encourages the municipalities and the STPs to jointly prepare and submit a single LTCP for the entire hydraulically connected system. This will help to ensure cooperation and coordination for dischargers within the sewershed.

The National CSO Policy anticipates the “review and revision, as appropriate, of water quality standards and their implementation procedures when developing CSO control plans to reflect site-specific wet weather impacts of CSOs.” The appropriate timing, however, for conducting such “review and revision” is after the effect of CSO abatement measures on water quality has

been evaluated through water quality monitoring and modeling and/or after appropriate portions of the LTCP has been implemented. Please see **RESPONSE 70** of Section A of this Response to Comments document.

57. COMMENT: Does the Department or EPA anticipate offering funding specifically for CSO control improvements? Or will the cost of these improvements have to compete for NJEIT funding with POTW improvement and future MS4 improvements and other regulatory driven infrastructure improvements? We need to know what type of financial support will be available for LTCP related improvements and their operation as this will be an important factor in selecting alternatives and establishing implementation schedules. Fort Lee found in the 2007 Cost Performance Report, the capital cost estimate to reduce CSOs to 3 to 7 per year was $45,000,000 to $105,000,000. This translates to a cost of $4,700 to $11,000 per family. This is a 2007 based capital cost only and does not include cost of operations. These costs cannot be borne by a community like Fort Lee without some form of public funding. [28] [31]

58. COMMENT: The studies required for this permit are very costly. For the last CSO permit, the Department provided a grant of 20% to help fund the requirements of that permit. Will the Department make available any grant funds dedicated to the studies and reports required by this permit? [20] [35] [42] [44]

RESPONSE 57-58: While funding is generally associated with the construction of treatment works improvements, funding for planning and design and other permit requirements is available through the New Jersey Environmental Infrastructure Financing Program providing the planning and design work results in a capital improvement. The Department also set aside funds for CSO related projects and is expecting to have between $3M to $6M for principal forgiveness loans in the SFY16 Program. In addition to reserving 50% of the available principal forgiveness funds for the construction and implementation of CSO abatement projects utilizing green practices, the Department reserved $500,000 for integrated water resource planning. Eligibility for integrated water resources planning financing is limited to CSO communities. Prioritization was given to submittals that are part of a regional plan. Prioritization considered factors such as the total square miles and/or the number of CSO outfalls that the plan will address. For more information on CSO related funding and the priority system please see www.state.nj.us/dep/dwq/cwpl.htm.

59. COMMENT: This permit impacts the City of Gloucester; there is an environmental versus economic impact. [2]

RESPONSE 59: The Department recognizes that there are economic impacts associated with implementation of the NJPDES CSO permit requirements. Again, the Department requires coordination within the hydraulically connected system which will likely improve efficiency and reduce costs both for preparation of the LTCPs and for implementation of cost-efficient CSO controls. See also **RESPONSE 53** and **RESPONSE 57-58** of Section A of the Response to Comment document.

60. COMMENT: EPA suggests that the following sentences within the Regulatory Background section be changed as follows:

First paragraph

"~~The U.S. Environmental Protection Agency (EPA) estimated the CSO abatement costs for the 1,100 national communities served by CSSs to be approximately $41.2 billion in the May 1995 Combined Sewer Overflows - Guidance for Nine Minimum Controls.~~ As per EPA's 2008 Clean Watersheds Needs Survey – Report to Congress, estimated abatement cost for CSOs was $63.6 billion nationally."

Second paragraph

"~~In the Wet Weather Quality Act of 2000, Congress amended the CWA to incorporate the National Policy. As amended, the CWA requires that all permits, orders and decrees issued to regulate combined system overflows must comply with the National Policy. 33 U.S.C.A. § 1342(q)(1). DEP incorporated the National Policy verbatim into its regulations at N.J.A.C. 7:14A-11.12 – Appendix C.~~ In the Wet Weather Quality Act of 2000, Congress amended the CWA to require that all permits, orders and decrees issued to regulate combined sewer system overflows "shall conform" to the National Policy, 33 U.S.C.A. Section 1342 (q)(1). DEP incorporated the National Policy verbatim into its regulations at N.J.A.C. 7:14A-11.12 – Appendix C." [11] [24]

RESPONSE 60: The Department hereby accepts these changes for the purposes of the administrative record. The Department does not believe that these revisions to the background section of the Fact Sheet are necessary.

61. COMMENT: EPA suggests that the following sentences within the Key Elements of the National CSO Policy subsection be changed as follows:

~~The National Policy requires permittees to implement Nine Minimum Controls (NMCs)~~ The CSO Control Policy required permittees to implement the nine minimum controls with appropriate documentation no later than January 1, 1997 and to develop and implement a Long Term Control Plan. [11] [24]

RESPONSE 61: The Department does not believe that these revisions to the background section of the Fact Sheet are necessary.

62. COMMENT: Regarding public notices and Fact Sheets for certain NJPDES CSO permits, the statement "NJDEP has historically been regulating the majority of discharges from CSOs through authorizations under Master General Permit (MGP) NJ0105023 and others through individual permits, consistent with the National Policy for CSO Controls" is not accurate. The phrase "consistent with the National Policy for CSO" should be removed. [11] [24]

RESPONSE 62: The Department maintains that the MGP was issued consistent with the National CSO Policy and remains in effect until the effective dates of these Final NJPDES CSO permits. EPA has not exercised its review authority for the CSO MGP.

63. COMMENT: Consistent with the CWA, 33 U.S.C. § 1251 *et seq.*, and EPA's guidance, municipalities with CSOs are "required to implement the NMCs … and to develop and implement LTCPs that will ultimately provide for full compliance with the CWA (i.e., meeting technology-based effluent limitations and attainment of [water quality standards] WQS)." (*See* EPA Letter Dated Feb. 4, 2010, Responding to Specific Questions Raised by Senator Grassley, at 2). The primary purpose of requiring an LTCP is to ensure that CSOs are not in violation of applicable WQS. EPA, in a response to a Senator's inquiry regarding CSOs, recognized that where municipalities with CSOs are not causing an exceedance of the applicable WQS then further water quality based limitations, *via* the LTCP, are not necessary to control CSO discharges.

For several years, EPA Region 2, the New York Department of Environmental Conservation (NYDEC) and the Department have been working cooperatively under the Harbor Estuary program to evaluate compliance with bacteria standards and, as necessary, develop a TMDL to establish the degree of pathogen control needed for various areas. In 2011, following the evaluation of the data for the harbor, EPA informed the Department that "several harbor CSO permittees (NHSA Adams Street, NHSA River Road) will not require water quality-based load reductions for nutrients or pathogens and, as a result, will not be subject to TMDLs; therefore, NJDEP can proceed now to issue permits consistent with the U.S. Environmental Protection Agency's CSO Control Policy for these facilities." (*See* July 5, 2011 Letter from Judith A. Enck, Regional Administrator, EPA Region 2 to Commission Bob Martin, NJDEP). EPA determined that, based upon available data and system analysis that the CSO discharges associated with the Adams Street and River Road facilities were complying with existing WQS. A synopsis of the data from the past 40 years published by the Harbor Estuary program is contained in the Synopsis of Lower Hudson River Bacteria Standard Compliance.

If the State can conclude that WQS are being attained despite CSO discharges, for example the E. coli criteria are never exceeded anywhere in the segment designated for primary contact as a result of the CSO discharge, then it may be possible for the State to conclude that there is no reasonable potential for the CSO discharge to cause or contribute to an exceedance of WQS, and thus no water quality based effluent limitation (WQBEL) is needed to further control those CSO discharges.

All studies and data compilations confirm that the area of the Hudson River adjacent to the NHSA facilities meets, not only applicable secondary contact standards, but also any potentially more restrictive full body contact standards. NHSA is not aware of any data that contradicts such a finding. Moreover, NHSA is not aware of any data showing that even if more stringent standards were required (*i.e.*, contact recreation) that these facilities would not be able to comply. In any event, the Department is required to use existing WQS as the baseline for determining whether these facilities must develop a LTCP; and as these facilities are complying with applicable WQS, NHSA should not be required to develop an LTCP.

NHSA includes in its comments an EPA letter and synopsis of water quality for pathogens as its demonstration approach that further reduction of CSOs by our system under an LTCP are not necessary, and therefore, the detailed studies required by the permit for assessing LTCP compliance are not necessary for this system. [25] [29]

RESPONSE 63: CSOs are subject to both the technology-based and water quality-based requirements of the CWA's discharge permitting system, National Strategy, 54 Fed. Reg. at 37371; National Policy, Part I.A, 59 Fed. Reg. at 18689, and permittees must satisfy the more stringent of the technology-based or water quality-based requirements of the CWA. N.J.A.C. 7:14A-13.2. The ultimate goal of the CWA is to eliminate the discharge of pollutants altogether, 33 U.S.C.A. § 1251(a)(1); WQS are intended as an "interim goal" on this path, a backstop to guarantee a minimum level of pollution control is achieved to protect designated uses of waterways until discharges can be eliminated. Id. at § 1251(a)(2). If, however, permittees can reasonably adopt more stringent controls under the technology-based standards than would otherwise be required to meet WQS, they are required to do so. By seizing on the WQS as the end goal of the LTCP, the commenter overlooks "the most salient characteristic of this statutory scheme, articulated time and again by its architects and embedded in the statutory language, . . . that it is technology-forcing." *NRDC v. EPA*, 822 F.2d 104, 123 (D.C. Cir. 1987). The CWA's permitting scheme is designed to push dischargers "to achieve ever-increasing efficiencies and improvements in pollution control." Id. at 124. The CWA does not permit dischargers to "coast" using less than BAT/BCT technology-based controls simply because they are currently meeting WQS. Id. at 123.

To this end, the National CSO Policy requires CSO permittees to evaluate a range of control alternatives up to and including measures to eliminate CSOs entirely and to capture 100% of wet weather flows. Part II.C.4, 59 Fed. Reg. at 18692. Permittees must also choose either the Presumption or Demonstration Approach to ensure they meet the water quality-based requirements of the CWA. Thus, the purpose of preparing an LTCP is not just to ensure that WQS are met, as the commenter states, but also to evaluate a reasonable range of alternative control strategies to further reduce or eliminate all CSO discharges. National Policy, 59 Fed. Reg. at 18692. Under both the Presumption and Demonstration approaches, to comply with the CWA's technology-based requirements, the permittee must complete a Cost/Performance Analysis as part of LTCP #5 to determine what level of technology to control CSO discharges may be reasonably implemented. 59 Fed. Reg. at 18693. The Demonstration Approach requires the permittee to show both that WQS are met and that its control program "provide[s] the maximum pollution reduction benefits reasonably attainable." 59 Fed. Reg. at 18693. In other words, it is not enough to rely on existing controls if CSOs can be reduced or eliminated through reasonably attainable measures.

Therefore, the commenter is not correct that NHSA is excused from developing an LTCP for CSOs that discharge to waterways that may already be in compliance with current WQS. Permittees who rely on the Demonstration Approach for WQS must still prepare an LTCP to evaluate whether further reductions are reasonably attainable through improved controls.

Further, it is not clear to the Department what assessment NHSA is using to determine whether the waters above, below and near to the CSO discharge are meeting WQS.

To demonstrate compliance with WQS, the permittee is required to implement the monitoring requirements of LTCP #1 and #9. This includes ambient in-stream monitoring conducted in accordance with *Receiving Waters Monitoring Work Plan Guidance for the CSO Program* as available at http://www.state.nj.us/dep/dwq. The permittee may use previous studies to the extent that they represent the currently required information. However, any historical data or data collection shall be described in a work plan that is subject to approval by the Department, and must have been collected/conducted under a previously approved Department work plan.

The commenter contends that EPA has stated that certain Harbor estuary permittees will not receive water quality based load reductions from nutrients or pathogens and, as a result, will not be subject to TMDLs. This is a separate issue from the NJPDES CSO permit conditions and should not be misconstrued to mean that the CSO permittees do not have to comply with the NJPDES CSO permit conditions including a demonstration that CSO discharge(s) will not preclude attainment of the WQS. While TMDLs are a separate issue, it is important to note that the Department has identified numerous technical deficiencies with the data collection as part of the harbor estuary TMDL process. This is described in further detail in **RESPONSE 64-67** of Section A of this Response to Comments document. Additionally, data collected as part of the TMDL could have been collected during conditions that do not represent CSO discharges such as during dry weather conditions or at a sampling location that is not representative of CSO discharges such as in the middle of the river.

Regarding the commenter's assertion that submission of the attachments included in their comments, namely the EPA letter and synopsis of water quality for pathogens, can serve as the "demonstration approach" required under the permit, the Department has determined that this submission is not technically sufficient to meet the NJPDES CSO LTCP requirements. The permittee is required to complete the LTCP as a separate submission which could include a demonstration approach along with supporting documentation.

64. COMMENT: The Department intended to allow CSO permittees to integrate the results of TMDL water quality studies for pathogens, nutrients, and other pollutants into their LTCPs. This intention made sense, since CSO discharges may well constitute a negligible component of the water quality impairments of the receiving waters for this permit. These impairments include ammonia, arsenic, Benzo(a)Pyrene, cadmium, chlordane, chromium, cyanide, DDD, DDE, DDT, dieldrin, dioxin, dissolved oxygen, heptachlor epoxide, hexachlorobenzene, mercury, mercury in fish tissue, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), thallium, turbidity, and un-ionized ammonia. Absent from this list is fecal coliform, the relevant indicator for secondary contact recreation suitability and the parameter that would be expected to be of greatest importance for CSO discharges.

The Department now proposes to move forward with long term CSO control planning without having any sense for the importance or magnitude of CSO discharges with respect to the achievement of WQS. This represents an enormous public expense without any assessment of

the potential water quality benefit. It is even possible that some water quality problems could be made worse by eliminating CSOs. For instance, if stormwater runoff is an important source of contamination, sewer separation to eliminate CSO discharge may actually exacerbate the water quality problem. The reason is that most stormwater in a CSS gets treated prior to discharge, whereas stormwater in a separated system may not receive any treatment prior to discharge. The Department should implement a diagnostic phase to assess the actual water quality impact of CSOs before deciding to implement any new CSO control requirements. [33] [34] [40]

65. COMMENT: There is a very discreet and concrete program to address the different sources of pollution into the Hackensack and other rivers to determine how WQS are being exceeded which is the development of a TMDL. How do you account for the other forms of pollution that come from CSOs and from stormwater without the TMDL, not just for pathogens, but for nutrients and toxics? It is hard to understand these questions without having the TMDL for pathogens for the Hackensack River. Our goals are to meet WQS which is what the CWA requires. But if permits seek reductions in CSO volume or the pollutants from CSOs, you don't know how much to reduce them until you know how you meet WQS.

The Department should not split up the process of CSO permitting and TMDLs. This will be unfair to Ridgefield Park, Hackensack, and whomever has CSOs because you have to reduce your flow because we're not meeting WQS. New Jersey is not meeting WQS for nutrients because we've overdeveloped in New Jersey and too much storm water is coming from impervious cover throughout Bergen County. The Department and EPA seems to have given up on the idea of the TMDL for the Hackensack River, not just for pathogens, but for nutrients and toxins. The LTCPs are designed to meet WQS. But if you don't know how much to reduce it by to meet WQS, how do you make those LTCPs? [46]

66. COMMENT: The Department's intention for the 2004 MGP was to allow the CSO permittees to integrate the results of ongoing TMDL studies into the LTCP and to not require permittees to develop and implement elements of the LTCP until the TMDLs for pathogens were established. The TMDL water quality studies were intended to help develop water quality goals for receiving waters; identify CSO and non-CSO sources of pollution; and identify load reduction objectives and allocations through establishment of TMDLs for pathogens, nutrients and other pollutants determined to be responsible for impairments. [19] [26]

67. COMMENT: The Fact Sheet indicates that, "after reviewing the draft water quality study and associated documents from EPA, the Department determined that it was technically deficient, and that rather than wait for an acceptable water quality study for TMDLs, the Department determined that it will move forward on individual permits requiring permittees to develop and implement elements of the LTCP at this time." The EPA TMDL work included a Water Quality model of the Harbor/Estuary Complex that the permittee intended to use as part of this permit.

What parts of the TMDL study were deficient? Were the deficiencies in the model, the loadings, the WQS and intended uses? If the permittee is required to undertake a new model, the time period to produce and test a new model must be included in the schedules for this permit. [19] [25] [26] [35] [42] [44]

RESPONSE 64-67: CSO permits address both technology-based and water quality based requirements of the CWA. It is appropriate for the CSO permits to require compliance with the NMCs, which are the minimum technology-based controls required by the National CSO Policy, 59 Fed. Reg. at 18695, and to require preparation of an LTCP that evaluates alternative CSO controls as discussed in the preceding response, even before the TMDLs are adopted. The requirement to reduce CSO discharges through technology-based and water quality based measures should not be delayed further, and there is sufficient flexibility to integrate TMDLs and water quality studies as they are completed into development and implementation of LTCPs.

As described in the Fact Sheet, the 2004 MGP reflected the Department's intention to allow the CSO permittees to integrate the results of ongoing TMDL studies into their LTCPs. The TMDL water quality studies were intended to help develop water quality goals for the receiving waters, identify CSO and non-CSO sources of pollution, and identify load reduction objectives and allocations through establishment of TMDLs for pathogens, nutrients and other pollutants determined to be responsible for the impairments. As indicated in the Fact Sheet that accompanied the 2004 MGP, the Department did not intend to require the permittees to develop and implement all elements of the LTCP until the TMDLs for pathogens were established.

The Department expected that TMDL studies would have been completed during the 2004 MGP term, however, the studies were not completed until after the MGP expired. On March 15, 2012, EPA provided the Department with a draft of the water quality study and associated documentation that was intended to provide the basis for the pathogens TMDL in the NY/NJ Harbor. After reviewing the draft water quality study, the Department determined that it was technically deficient, and that the Department could not move forward with the TMDL for pathogens at that time.

A letter describing these deficiencies was issued on June 1, 2012 letter from Director Jill Lipoti, Ph.D. of the Department's Division of Water Monitoring & Standards to Chief Jeffrey Gratz, Water Programs Branch of EPA – Region 2. Dr. Lipoti's letter described deficiencies with the water quality study and technical support document "Pathogen Indicator Organism TMDLs for the Hackensack and Passaic Rivers Supporting Primary Contact Recreation": Key points of that letter follow:

> "The most significant shortcoming of the technical support document is that EPA has not held the contractor to the QAPP [Quality Assurance Project Plan] standards. A QAPP sets forth the rigor that is to be applied to produce a defensible product. Key failings with respect to the QAPP include the quantity of data that was used in calibrating and validating the model for the waterbodies in question.
>
> Very little data was used to populate the model and the data that was used fails to capture an appropriate range of conditions. There were five samples that were collected in a one month period. There was only one wet weather event during this period.

> There are no model skill assessments provided for the Hackensack and Passaic. Based on visual inspection of the graphs provided, the predictive power of the model is poor.
>
> The Model Evaluation Group (MEG) offered comments on the model, including some comments specifically with respect to the Hackensack River model performance. It is unclear whether these comments were ever addressed, and the model adjusted...
>
> Use of this flawed document to proceed with TMDL development could open the Department to major criticism and possible litigation. Substantial resources would be needed to address the deficiencies in the technical support document, (i.e. adhere to the QAPP, address the concerns raised by the MEG, obtain sufficient monitoring data to populate the model, and improve its predictive power) not to mention the time to make these corrections."

In a letter dated June 18, 2012 from Commissioner Bob Martin to Regional Administrator Judith A. Enck of EPA – Region 2, the Department explained why it would not rely on the TMDL study completed by EPA, but that the Department would nevertheless move forward with CSO permitting. In that letter the Department reiterated the deficiencies in the technical support document described in Dr. Lipoti's earlier letter.

The Department maintains that it cannot proceed with the pathogen TMDL development at this time based on the existing water quality study. However, regardless of whether or not a TMDL is completed for the Harbor Region, permittees are required to design, submit and implement LTCPs in accordance with the National CSO Policy and state and federal regulations. The first phase of any LTCP, as described in the permit and Fact Sheet, is to gain a comprehensive understanding of the CSO system – both hydraulically and as it relates to water quality. This is achieved through the characterization, monitoring and modeling phase of the LTCP - quantifying all potential sources and their relative impact on a CSO-impacted area. Based on that, a permittee can make a sound decision regarding which CSO-abatement measures are best for a specific CSO system. The "diagnostic phase" mentioned in the comment is, in fact, this characterization and modeling phase of the LTCP discussed. To the extent that sampling conducted previously can be used for the CSO compliance applicability, the Department will consider it. Please see *Receiving Waters Monitoring Work Plan Guidance for the CSO Program* (available at www.state.nj.us/dep/dwq/cso.htm*)* for guidance on the appropriate data that needs to be submitted to determine compliance with WQS.

The Department acknowledges that stormwater discharges can contribute or impact to water quality but these discharges. The Department administers a variety of NJPDES stormwater permits to address pollutants in stormwater discharges for both industries and municipalities. Additional information is available at www.state.nj.us/dep/dwq including a complete list of the MGPs. In addition, the Department is currently preparing the Draft renewal MS4 permit for Tier A municipalities which will further enhance the stormwater controls to be implemented by New Jersey Tier A municipalities.

For these reasons, rather than continue to wait for an acceptable water quality study and for TMDLs to be adopted, the Department has determined that it is necessary to move forward on individual permits requiring permittees to develop and implement all elements of the LTCP at this time. In addition, the pressing need to address CSO impacts cannot wait indefinitely for TMDL studies. The Department maintains that there is sufficient flexibility to integrate water quality studies in the process of developing, and ultimately implementing, the LTCPs when and as studies are completed, but that development of LTCPs should not be delayed further. Finally, there is no federal or state requirement that LTCPs must await development of TMDLs.

68. COMMENT: What was not included in the Fact Sheet was a June 2012 letter from the Department's Commissioner to Judith Enck, Regional Administrator for EPA-Region 2 stating that the Department will not pursue completion of the impending TMDL for pathogens, but will implement an integrated water quality approach addressing not only CSOs but strategies for stormwater, wastewater, and other water quality issues. [26]

RESPONSE 68: The concepts of the June 2012 letter are described in the Draft permit Fact Sheet in the Department's rationale for moving forward with the issuance of individual NJPDES permits rather than waiting for the water quality study for TMDLs. Additionally, this document is part of the administrative record since it is now referenced in both comments on the permit as well as in this Response to Comments document. Please see **RESPONSE 64-67** in Section A of this Response to Comments document.

69. COMMENT: The fact that EPA with their knowledge and resources could not develop a technically sound TMDL study after nearly a decade of effort illustrates the complex nature of the receiving waters within the New York – New Jersey region (Bayonne) and the fact that pollutant loads within the tidal and non-tidal tributaries to Upper New York Harbor complex (Hudson River, Passaic River, Hackensack River, Newark Bay, Kill Van Kull, etc.) (Ridgefield Park) are not easily determined and/or modeled. Yet in the light of this, the Department has made a determination to move forward with development and implementation of the LTCP using the Demonstrative or Presumptive Approaches as outlined in the EPA National CSO Policy.

The Demonstrative approach requires a detailed monitoring and modeling study of the land base and receiving waters to illustrate the level to which CSO contribute to non-attainment of WQS. The failure of EPA to do the same, and the cost and complexity of such an undertaking, clearly shows that the Demonstrative Approach is far beyond the abilities of any single permittee, or possible group of permittees, to undertake. Accordingly, permittees will be restricted to use of the Presumptive Approach, which presumes that restricting CSO Outfalls to four or less overflows per year, or the capture and/or treatment of 85% of the CSO volumes on an annual basis will result in achievement of WQS within the receiving waters. Failure to achieve attainment of WQS will leave the permittee responsible for undertaking additional work as needed until compliance with WQS is achieved.

A dictionary indicates that the word presumptive has the following definitions: 1. Providing a reasonable basis for belief or acceptance; 2. Founded on probability or presumption (acceptance

or belief based on reasonable evidence). The problem is that there is no reasonable basis or evidence to show that the Presumptive Approach will actually achieve WQS in the receiving waters. In fact there have been a number of documented cases across the United States where permittees using the presumptive approach failed to achieve compliance with WQS. This is not surprising since discharges from separate stormwater outfalls have been shown to be a major source of pollution in urban and suburban regions. The "reasonable evidence" is that many rivers and streams within the State of New Jersey that receive no CSO discharges (Passaic River upstream of the Great Falls, Second River, Lodi River, etc.) currently do not meet existing WQS. The "reasonable evidence" in this case is in opposition to the belief. The elimination of CSO discharges will not necessarily result in attainment of WQS.

The following is recommended:

- The State of New Jersey should identify CSO and non-CSO sources of pollution, and identify load reduction objectives and allocations through establishment of TMDLs for pathogens, nutrients, and other pollutants determined to be responsible for impairments.
- At a minimum, the Department should eliminate any and all references to "compliance with water quality standards" within the permit. [19] [26]

RESPONSE 69: Please refer to **RESPONSE 64-67** of Section A of this Response to Comments document concerning the Department's decision to issue CSO permits without adopted TMDLs. In addition, please refer to **RESPONSE 109-118** in Section D of this Response to comments document regarding the Presumption Approach and **RESPONSE 138-139** in Section D of this Response to Comments document regarding the Demonstration Approach. Pursuant to the National CSO Policy and N.J.A.C. 7:14A-11 (Appendix C), permittees are not required to allocate wasteloads or perform a TMDL study. Under either the Presumption or Demonstration Approaches, where background pollutant levels result in non-attainment in the receiving waters, the permittee must show that its discharge will not preclude attainment with the WQS.

70. COMMENT: The Fact Sheet points out that the National CSO Policy contains four key principles, the fourth of which is: "Review and revise, as appropriate, water quality standards and their implementation procedures when developing long term CSO control plans to reflect site-specific wet weather impacts of CSOs." Given that the New Jersey Surface Water Quality Standards (SWQS) can only be revised by the Department, what revisions to the SWQS and its implementation procedures have the Department put into place to allow long term CSO control plans to reflect site-specific wet weather impacts of CSOs? For instance, the application of secondary contact recreation criteria to SE2 (saline estuaries category 2) waters during and immediately following storm events may not be appropriate. Unless the SWQS are revised specifically to reflect the transient wet weather impacts of CSOs, it will not be possible to fully implement this key principle of the National CSO Policy into long term CSO control plans. [33] [34] [40]

RESPONSE 70: As detailed in **RESPONSE 63**, CSOs are subject to both the technology-based and water quality-based requirements of the CWA's discharge permitting system. The ultimate goal of the CWA is to eliminate the discharge of pollutants altogether, 33

U.S.C.A. § 1251(a)(1); WQS are intended as an "interim goal" on this path, a backstop to guarantee a minimum level of pollution control is achieved to protect designated uses of waterways until discharges can be eliminated. Id. at § 1251(a)(2).

The National CSO Policy anticipates the "review and revision, as appropriate, of water quality standards and their implementation procedures when developing CSO control plans to reflect site-specific wet weather impacts of CSOs." Therefore, the Department would consider revisions to the WQS but maintains that it is premature to consider changes prior to the implementation of the NMCs; the assessments required to be conducted for the first five elements under the LTCP; and after the effect of CSO abatement measures on water quality has been evaluated. This will include incorporation of any conclusions based on a cost/benefit analysis. In the event that water quality standards will not be attained with additional controls, an evaluation can be conducted as to whether the WQS need to be revised. This is consistent with the National CSO Policy where a permittee is required to achieve the designated use attainable for the water body. In order for the Department to consider modifying the WQS to downgrade an existing use, the permittee must first demonstrate the highest use attainable, after implementation of the LTCP. If it is determined that even after full implementation of the LTCP, WQS will not be met – the Department may consider an application with supporting documentation for downgrading the existing use.

EPA's "Guidance on Coordinating CSO Long-term Planning with Water Quality Standards Reviews" provides further details on this issue including the appropriate timing to conduct any "review and revision" of WQS.

71. COMMENT: Achieving WQS is one of the CSO control objectives stated several times in the Draft permit; however, the permit does not identify which standards apply. Receiving waters may be impaired for many parameters by many waste sources such as point sources and non-point sources including stormwater. CSO is just one of these many sources. The design basis of CSO treatment alternatives must include the parameters of concern which need to be identified before the LTCP process begins. Will the Department be identifying the parameters of concern in the Final permit? [28] [31]

72. COMMENT: In the three year window when the LTCPs are due, what will be the types of pathogens we will have to control? Will they have to be controlled at the CSO point or at the STP? Do we have any idea as to how we are going to apply those pathogen controls in the three year window? Who's going to be handling those outfall controls, the discharger at their points or the STP? [2]

73. COMMENT: A change from SE3 WQS for bacteria to the proposed recreational standards will have a tremendous impact on the evaluation of CSO controls. A review of the NJ Harbor Dischargers Group 2010 Water Quality Report appears to indicate that the Arthur Kill is well within the current WQS, while the Elizabeth River has occasional seasonal exceedances of the current WQS for fecal coliform. A review of the sampling data collected for enterococcus indicates that the ability to meet a future WQS of a geomean of 35 cfu/100 ml in the Arthur Kill would be borderline, while the data for the Elizabeth River indicates that significant

improvements would be necessary for compliance. The plots provided in the report provide geometric means, but do not reflect the maximum levels sampled. Compliance with the standard threshold value of <104 cfu per 100 ml cannot be assessed from the data in this report. A future change in the WQS will clearly have tremendous impacts on the level of CSO control. A phased approach to CSO control should be considered. The first phase should focus on compliance with current WQS for bacteria with the flexibility to expand or provide additional control measures in the future. [9]

RESPONSES 71-73: Implementation of the LTCP is anticipated to extend through multiple permit cycles and may be subject to revision during these time frames. The LTCP must be completed within either 36 or 59 months after EDP. Implementation of the LTCP is not required until after it is approved by the Department. However, permittees are required to submit the work plan(s) for baseline monitoring within the first year of the permit which shall include selection of appropriate pathogens.

N.J.A.C. 7:9B specifies criteria for multiple pathogens dependent on the classification of the water body, including fecal coliform, enterococcus and E. Coli. Such monitoring is expected to address the water quality standards, which are in effect at the time of submission of the relevant LTCP elements, as well as the possibility for future revisions to the WQS. See **RESPONSE 124** of Section D for further discussion on EPA's proposed changes to the WQS.

The permittee should first characterize their system, in consultation with existing and proposed WQS. As part of the LTCP process, the permittee is required to evaluate a range of CSO control alternatives, based on practical and technical feasibility, and the water quality benefits of constructing and implementing various remedial controls and combinations of controls. The objective of the selection of monitoring parameters is not to conduct an impact assessment of every known parameter, but rather to establish baseline water quality conditions of the CSO receiving water body.

Necessary controls will be determined on a case-by-case basis as determined through the implementation of the NMCs and the development of the LTCPs. The owner/operator of the CSO control measure will be responsible for the installation, operation and maintenance of such measures. The National CSO Policy requires that LTCPs meet the goals of the CWA. This will be based, in part, on ambient water quality monitoring. Such monitoring should occur in accordance with the Department's guidance entitled *Receiving Waters Monitoring Work Plan Guidance for the CSO Program* which includes upstream and downstream sampling, during both wet and dry weather, from the CSO outfall. Necessary controls for meeting the goals of the CWA may be implemented at the outfall, at the STP, or within the hydraulically connected system itself.

Please also refer to **RESPONSE 23-26** for CSO Monitoring and **RESPONSE 193-196** regarding responsibility for implementing CSO control measures where both responses are in Section D of the Response to Comments document.

74. COMMENT: EPA suggests that additional language be added regarding the NMCs of the LTCP to say "Permittees shall develop and submit the long-term CSO control plan as soon as practicable, but generally within two years after the date of the NPDES permit provision, Section 308 information request, or enforcement action requiring the permittee to develop the plan. NPDES authorities may establish a longer timetable for completion of the long-term CSO control plan on a case-by-case to account for site-specific factors which may influence the complexity of the planning process." [11] [24]

75. COMMENT: The Fact Sheet states in several places that the Department may consider granting an additional year for LTCP development if the hydraulically connected permittees develop one cooperative LTCP. Paragraph F states a 3 year compliance period with no reference to the additional year that may be granted by the Department. How will the schedule be extended if the permittees agree to develop and submit a single LTCP? Will this require a permit modification? [28] [31]

76. COMMENT: The following language is included in the Fact Sheet: "The Department recognizes that the development of such a single comprehensive LTCP among multiple entities will require extensive coordination and cooperation…will consider requests to extend the compliance schedule for the submittal of a single, comprehensive LTCP." Although this appears in the Fact Sheet, it was omitted from the permit. Please include language in the permit to extend the compliance schedule in the permit. [42] [44]

RESPONSE 74-76: The Department acknowledges EPA's suggested language from the National CSO Policy; however, since the Fact Sheet is not part of the final permit, the Department hereby acknowledges this suggested language for the purposes of the administrative record.

With respect to the ability of NPDES authority to extend compliance schedules due to the size and complexity of New Jersey's integrated CSO systems, the Department contends that two years is an adequate amount of time to generate a meaningful LTCP. The Department has determined that "as soon as practicable" shall be understood to be from 36 months to 59 months.

As noted in these comments, the potential for an extension for the LTCP from 36 months to 59 months has been described in the Fact Sheet which was subject to public comment and notice. Provided such a request is submitted and approved by the Department, the Department may extend the compliance schedule an additional 2 years. Many permittees have already committed to a single LTCP. The Department will accept such requests up to the effective date of the permit (EDP)+3 months, provided that the receiving STP and all the participating municipalities have agreed to a single LTCP. For those permittees who have submitted letters prior to finalization of the permit committing to prepare a single LTCP, a modified schedule has been included in the Final NJPDES CSO permits. For those permittees who submit a coordinated LTCP commitment letter within EDP +3 months, the Department may issue a modification of the permit to extend the relevant compliance dates.

77. COMMENT: The first paragraph of Section B states that the final LTCP is to be submitted on or before EDP +3 years. Given the complexities of the LTCP process, this deadline is not achievable for the Borough of Fort Lee (NJ0034517). Through subsequent comments we demonstrate that 52 months are needed to complete all the surveys, inspections, sampling, analyses, modeling, alternatives evaluations and document preparation and review. [28]

78. COMMENT: On page 26 of the Fact Sheet, the Department requires that NBMUA "work cooperatively" with the Town of Guttenberg. Indeed, it is not possible to perform CSO planning in isolation, since actions taken by one municipality within the system will affect the other because they are within the same hydraulically connected CSS. The Department therefore encourages the development of a single, comprehensive LTCP, and correctly points out that such would require "extensive coordination and cooperation." Offering to "consider requests to extend the compliance schedule" does not change the reality that the time allotted to develop a comprehensive LTCP for the Woodcliff CSO system is inadequate. It is not realistic to expect the NBMUA and the Town of Guttenberg to develop a comprehensive LTCP in three years; such an undertaking will take every bit of four and a half to five years or more to develop. [33] [34] [40]

79. COMMENT: The Draft permit provides EDP +3 years to complete and submit a final LTCP. PVSC requests a minimum of four and a half years to comply with this requirement. PVSC's engineering consultant has provided a Gantt Chart as an attachment to their comments, and estimates that a minimum of four and a half years is required to implement all CSO requirements of the Draft permit. In addition, working with the municipalities to develop an integrated and coordinated LTCP will require additional time for procurement of professional services and developing the framework for cost sharing agreements among participating permittees.

PVSC also faces unique challenges that are currently stressing the capacity of its staff. Rebuilding of the STP processes and electrical systems damaged as a result of Superstorm Sandy are ongoing and the design and construction of planned $250 million mitigation projects will be implemented during this permit cycle. The LTCP required studies are estimated to be in the range of $3 to $5 million for PVSC and its CSO municipalities. PVSC estimates that the non-Federal Emergency Management Agency (FEMA) recovery and mitigation costs will be approximately $40 million. Currently, PVSC does not have a quorum of Commissioners and is operating under a Gubernatorial Executive Order, so it is unable to bond for construction and/or design studies. $40 million in Sandy-related projects coupled with an additional $3 to $5 million in CSO LTCP studies will be an undue burden to PVSC's ratepayers. PVSC requests that the Department extend the implementation schedule for the CSO LTCP to EDP +59 months to alleviate the substantial burden on PVSC's ratepayers and to allow PVSC's staff the appropriate time to dedicate to the development of the CSO LTCP that will define how billions of dollars in infrastructure will be spent over the next 20 to 30 years. [42]

RESPONSE 77-79: Since PVSC and their hydraulically connected CSO permittees have committed in writing to develop a single, coordinated LTCP, these affected Final permits have been issued with extended LTCP compliance dates up to 59 months. For other permittees who

submit a coordinated LTCP commitment letter within EDP +3 months, the Department may issue a modification of the permit to extend the relevant compliance dates.

Note that the Department has extended several compliance dates as outlined in the CSO Submittal Summary. Please refer to **RESPONSE 55-62** in Section B of the Response to Comments document under Part IV.D for a detailed description of time extensions. The Department also plans to work closely with the permittees through the development of the LTCP and hopes that this close relationship will avert unforeseen delays. However, if unforeseen delays do occur even though the permittee has been acting in a responsible and timely manner, they may request an extension of the affected deadlines.

Specific Fact Sheet Comments

80. COMMENT: The permits should clearly define what facilities and associated system components are regulated by the permit and its location, e.g., maps of the appropriate portions of the collection system and the STP. For example, requirements in Part II of the permit refer to "permitted location" and "permitted facility;" however, the Gloucester City and Camden City permits only identify a single street address as the "Location of Activity." In the Camden City permit the "Location of Activity" states only, "Camden City, 4th Floor, City Hall." [5]

RESPONSE 80: The permits describe a variety of locational information. Part III does include the latitude, longitude, and receiving water body of each CSO outfall as the authorized discharge locations. The actual location information of the CSO outfalls is included in the Section 2 of the Fact Sheet. The permit authorization page includes both the name and address of the "Permittee" as well as the address for the "Location of Activity." Note that all of the CSO outfall locational information could not be listed on the permit authorization page so the location of the STP (in permits where the plant also owns the CSO outfalls), or the location of the municipal building (in permits where the municipality owns the CSO outfalls).

81. COMMENT: NBMUA and North Bergen Township are separate entities. The word "Township" should be removed from the permittee name, which should be: "North Bergen MUA." Throughout the Fact Sheet and permit, "North Bergen Township MUA" should be replaced with "North Bergen MUA," and the address, where listed, should be corrected.

North Bergen Municipal Utilities Authority
6200 Tonnelle Avenue
North Bergen, NJ 07047

The address that the Department used in the Draft permit is actually the address of the North Bergen municipal office.

The permit states that "The North Bergen MUA owns and operates a CSS …" and "The North Bergen MUA has sole ownership of the North Bergen Township CSS and the Woodcliff STP." These descriptions of the system owned and operated by NBMUA are incorrect; the NBMUA does not own or operate the CSSs that connects to the Woodcliff STP. [33] [34]

RESPONSE 81: The Department appreciates the clarification regarding the name and address associated with the North Bergen MUA (NJ0108898), as well as the fact that NBMUA and North Bergen Township are distinct entities with distinct requirements and responsibilities. While the Fact Sheet is not part of the Final permit, this response serves to amend the administrative record for those affected sections of the Fact Sheet.

These changes have been made to the Final permit authorization page as well as to the header of Parts III and IV in the Final permit for North Bergen MUA (NJ0108898).

82. COMMENT: There is a typo in the following sentence which should be changed as follows:

> "A complete list of studies performed by all CSO permittees in PVSC's hydraulically ~~collection~~ connected system is summarized in Appendix C at the end of this permit." [42]

RESPONSE 82: The Department recognizes this typographical error found on page 31 of 42 of the Draft NJPDES permit (NJ0021016). This response serves to amend the administrative record.

83. COMMENT: The CCMUA permit has "Combined Sewer Overflow (CSO) Permit" at the top of the page within Part IV Specific Requirements: Narrative. The City of Gloucester and City of Camden permits list "Combined Sewer Overflow (CSO) Permit" in Part III. It appears that the heading, "Part IV Specific Requirements: Narrative," is missing from these two permits.

The NJPDES Authorization Page for the City of Camden is included prior to the Fact Sheet, rather than at the beginning of the permit. [5]

RESPONSE 83: The commenter is correct regarding the missing heading in Part IV of the Camden City's (NJ0108812) and Gloucester City's (NJ0108847) Draft permits. The heading, "Part IV Specific Requirements:" is missing from the top of the Part IV sections of these two permits. **The Final permits have the correct heading added, "Part IV Specific Requirements: Narrative."**

The commenter is also correct that the placement of the NJPDES Authorization Page in the Draft permit for the City of Camden was incorrect and should have been at the beginning of the permit. **This administrative error has also been corrected in the Final permit.**

84. COMMENT: The Town of Guttenberg offers the following comments:

- The latitude and the longitude in the table on page 2 of 18 appears to be that of the outfall. This appears to be confirmed by Part III on page 1 later in the permit. This should be verified,

- The location of the outfall is approximately at 7000 River Road. The regulator and the outfall are separated by several hundreds of feet. The outfall name is not the outfall location. [29]

RESPONSE 84: The Department has revised the latitude and longitude included in the Town of Guttenberg Final NJPDES permit (NJ0108715) to be the latitude and longitude of outfall 001A where these coordinates match those included in Part III. The Town is required to verify the locations of the outfalls per Part IV.D.2.a.

The Department recognizes that the Outfall Name is listed at "70th & Boulevard" whereas the Town of Guttenberg contends that this information should state "7000 River Road." Since the Fact Sheet is not part of the Final permit, this response serves to amend the administrative record. This clarification does not affect the outfall designator which is correctly noted as discharge serial number (DSN) 001A.

85. COMMENT: The City of Newark offers the following comments:

- Please add 29A to Outfall Designator with 27A and 30A.

- Please change the status of Clay Street (009A and 010A) to "completed in January 2014." [35]

RESPONSE 85: The Department recognizes that the City of Newark (NJ0108758) contends that Outfall Designator 029A should be added to the table for 027A and 030A; **therefore, DSN 029A has been added to Part III.** The Department also recognizes that there has been a change in the status of the S/F Control Measures for Outfalls 009A and 010A since the Draft permit was issued on January 17, 2014. These clarifications serve to amend the administrative record.

86. COMMENT: The City of Paterson states that the outfall designation "030" should be changed to 030A. [40]

RESPONSE 86: The Department recognizes this error in Section 2 of the City of Paterson's Fact Sheet (NJ0108880) for Outfall Designator 030A whereas Part III appropriately identifies this outfall as "030A." Since the Fact Sheet is not part of the Final permit, this response serves to amend the administrative record.

87. COMMENT: The City of Paterson states that the sub watersheds in both tables on this page are not affected by tides; therefore, the "Outfall Configuration" indicating "Tidally submerged pipe" is incorrect. [40]

RESPONSE 87: The Department acknowledges that Paterson is not located on the tidal portion of the Passaic River. Since the Fact Sheet is not part of the Final permit, this response serves to amend the administrative record.

88. COMMENT: The City of Paterson states that for Outfall 030A (19th Avenue) the type of unit listed for this facility in the "Status" column is incorrect. The unit in place is a "GRANDE bar screen" Similarly, for Outfall 031A (Route 20 Bypass) the type of unit listed for this facility in the "Status" column, and repeated in footnote #1, is incorrect. The two internal regulators are fitted with "GRANDE bar screens." [40]

RESPONSE 88: The Department recognizes that the City of Paterson is suggesting corrections to Section 2 of the City of Paterson's Fact Sheet (NJ0108880) for Outfall Designator 030A under the "S/F Control Measures Status" column. However, since the Fact Sheet is not part of the Final permit, this response serves to amend the administrative record.

89. COMMENT: Bayonne MUA states that Outfalls 035A (Schuyler Place, ICSO#14) and 036 (North Street, ICSO #15) have been plugged off and have been eliminated. Accordingly, reference to these two outfalls should be eliminated from the Final permit. [26]

RESPONSE 89: The Department confirmed with its Northern Bureau of Compliance and Water Enforcement that these two outfalls have been sealed. Therefore, this response serves to amend the administrative record for NJ0109240. **Part III requirements have been appropriately deleted in the Final permit for Outfalls 035A and 036.**

90. COMMENT: The Town of Guttenberg offers the following comments:

- On Page 3 of 18, two tide gates said to be on the CSO. There is no tide gate on or in the Guttenberg system. The permit might be referring to some gate mechanism in the regulator at 70th Street and Boulevard East although that is not a tide gate. There is a duck bill on the discharge end of the pipe.

- The Town of Guttenberg owns the regulator at 70th Street and Kennedy Boulevard East. The Town also owns the netting chamber located approximately at 7000 River Road. Both facilities are maintained by the NBMUA under an Inter-Local Agreement.

- The regulator is owned by the Town of Guttenberg and operated/maintained by the NBMUA through an Inter-Local Agreement. It is located on 70th Street at Boulevard East in Guttenberg. It is not in North Bergen. That reference to North Bergen may be a result of saying that the regulator is at 70th Street and Kennedy Boulevard rather than Boulevard East.

- The netting chamber is located in Guttenberg along River Road an estimated 80 feet south of the border between Guttenberg and North Bergen.

- On Page 3 of 18, a 20,000 gallon holding tank in The Galaxy is specified. The Galaxy pumps their flow up to Boulevard East from their wet well or holding tank. In any event, the Town of Guttenberg does not own, operate or control that holding tank or wet well. All of the flow out of The Galaxy is combined.

- On Page 3 of 18, it is stated that the flow from Guttenberg goes to the PVSC STP. The Town sewer maps do not indicate that there is any connection that discharges into North Bergen and to PVSC. [29]

RESPONSE 90: The Department recognizes these technical clarifications; however, the Fact Sheet is not part of the Final permit so these changes are recognized for the purposes of the administrative record.

91. COMMENT: The City of Paterson states the outfall at CSO 028 should be added to the table at the top of the page. Similarly, Outfall Number 028A should be added to this listing, with Status being NOT COMPLETED.

The description of Paterson City's CSO discharge points notes that 23 CSO outfalls are currently in operation. This count excludes CSO 028, which was a designated outfall in the City's general permit until the time it was removed from the listing of active outfalls by the Department in a letter dated November 5, 2008. This letter rescinded authorization for several CSO points that were no longer in operation. This remains untrue for CSO 028. In a response to this letter dated January 13, 2009, the City (through counsel) advised the Department of their position that CSO 028 should not be eliminated from the general permit until such time as details of the work required to eliminate this discharge can be determined and agreed upon, and incorporated into a schedule to be made part of the Judicial Consent Order (JCO) governing the City's overall compliance with CSO regulatory mandates.

Pursuant to ongoing discussions with the Department, additional studies are underway to evaluate alternatives and determine the work required to eliminate CSO 028. It is anticipated that this will require both completion of sewer separation for the area served as well as extensive construction of additional sewers. As this work will not be completed prior to the effective date of the permit (EDP), CSO 028 should be included in Paterson City's individual permit until such time as it is completed, and added to the United States Geological Survey (USGS) map. [40]

RESPONSE 91: The Department recognizes that CSO 028 was a designated outfall in the NJPDES CSO general permit; however, authorization for CSO 028 was rescinded by the Department along with CSO 008, CSO 009, CSO 012, CSO 018, CSO 019, and CSO 020, due to sewer separation, elimination, and/or consolidation via letter dated 11/5/08. In order for the City of Paterson to have this outfall re-designated as a CSO discharge point, the City of Paterson needs to submit to the Department additional information sufficient to allow the Department to make the determination as to whether the discharge from Outfall 028 is combined or sanitary sewage. Information pertaining to the drainage area for Outfall 028 should include, at a minimum:

- Area(s) serviced through combined sewers;
- Area(s) serviced through separate sewers;
- Interconnection(s) between the separate sewered areas and combined sewered areas; and
- Storm sewer discharge(s) to the stream/river.

The Department is willing to revisit this issue upon receipt of the requested additional information.

92. COMMENT: The City of Paterson states that the tables designate the outfalls by prior identification numbers with an added "A" prefix. It is presumed that this prefix was intentionally added by the Department. The City wants to note that the outfall being designated as "033A" was previously designated as CSO 029A, as it was tributary to CSO 029. The prior designation will need to be revised to CSO 033A, as indicated here and throughout the Final permit document, if the prefixes are to be maintained. [40]

RESPONSE 92: The commenter is correct that the letter "A" was intentionally added by the Department in NJ0108880. The format utilized by the Department for labeling outfalls is an EPA requirement and consists of three numbers followed by a letter.

The discharge serial number (DSN) for the City of Paterson's CSO Outfall 029A was renumbered by the Department to 033A on October 11, 2013, and the City of Paterson was notified of this change by email from the Department (A. Doyle - Bureau of Surface Water Permitting) to the City of Paterson (J. DeBlock - Licensed Collection System Operator) on the above mentioned date. The reason for this change is that the City had two outfalls that it had designated as 029 and 029A (029A was tributary to 029), and by applying the Department's labeling convention to these two outfalls, Outfall 029 became 029A and Outfall 029A needed to be given a new DSN. For the City of Paterson, Outfall 033A was sequentially the next available CSO outfall number; therefore, Outfall 029A was renumbered by the Department to 033A. The tables and text in the Fact Sheet identify the City of Paterson's previously designated CSO Outfall 029A as 033A, and the Department has administratively made the change such that all future reference to this outfall will be at the new DSN including in Part III.

93. COMMENT: Section D.1.f of the NHSA Adams Street Draft permit (NJ0026085) states the S/F facility DSN 013A must be completed on or before May 2, 2014. This is inconsistent with the description of the ACO related to outfall DSN 013A presented in Section 12.B, which discusses an approved time extension to February 15, 2016. Please clarify. [25]

RESPONSE 93: The Department recognizes that there is a separate ACO document associated with the Adams Street NJPDES permit where the ACO specifies a date of February 15, 2016 regarding S/F controls. The Department also recognizes that the date reference of May 2, 2014 related to outfall DSN 013A is inconsistent in the Fact Sheet in Section 12.B. and Section 12.D.1.f of the NHSA Adams Street STP permit. The correct information is found in Section 12.B. where it states that the Department has approved a 654-day time extension to complete the construction and commence operation of S/F facility for outfall DSN013A, on or before February 15, 2016. This information should have been consistent in both sections (12.B. and 12.D.1.f.) of the Fact Sheet. The Fact Sheet is not part of the Final permit; however, this response serves to amend the administrative record.

Nine Minimum Controls (NMCs)

94. COMMENT: The Draft permit lists all of the NMCs Requirements. PVSC is not the owner/operator of the CSO outfalls and therefore is not responsible and cannot be required by the permit to comply with all NMCs. PVSC requests that the following changes and/or deletions be made to this section of the Fact Sheet to reflect PVSC's responsibilities:

"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 publicly owned treatment works 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, and~~
~~9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.~~

Permittees are encouraged to be creative and explore innovative and cost-effective measures in implementing the NMCs ~~to address their specific CSOs~~. The NMCs are not necessarily distinct and separate from one another. Many control measures can address and facilitate more than one of the controls at the same time (e.g., street sweeping can address both the "Control of Solids/Floatables" and the "Pollution Prevention" controls). With the assistance of the guidance document referenced above, permittees should continue to plan and pursue control measures that can achieve the ultimate goal of reducing overall CSO impacts in a holistic manner. Based upon the evaluation of the implementation of the NMCs, the Department has included enhancements in order to clarify requirements consistent with the National Policy. A brief description of the NMCs under this permit follows..."

Item Nos. 5 through 9 should be removed from the permit as these are not PVSC's responsibility and therefore should not be included in its Individual Surface Water Discharge Permit. [42]

RESPONSE 94: For STPs that do not own/operate CSO outfalls, a summary of the NMCs was included in the Fact Sheet for informational purposes where only some the NMCs were included in Part IV. The Department agrees that NMC #6, #8 and #9 do not belong in PVSCs NJPDES CSO permit (NJ0021016) since PVSC does not own/operate any CSOs at this time. Similarly, the Department did not include NMC #6, #8 and #9 in the NJPDES CSO permits for other STP permittees that do not own/operate CSO outfalls namely MCUA (NJ0020141), JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028). The Department appropriately included a reference to the fact that the STP does not own/operate any CSOs where an example of this language as included in Part IV of the PVSC NJPDES CSO permit is provided below:

"8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts

a. Since the permittee does not own and/or operate any CSO outfalls, this proposed permit action does not include the requirement to ensure that the public receives notification of CSO occurrences and impacts at this time."

Inclusion of this language is similar to the language as contained in other STP permits such as MCUA (NJ0020141) and JMEUC (NJ0024741). However, the Department acknowledges that while NMC #8 (Public Notification, Part IV.F.8) is not a requirement of PVSC's permit, PVSC has informed the Department that it has volunteered to coordinate portions of this task for their member municipalities including assistance with signage and the website requirements.

Regarding the inclusion of NMC #5 for STPs that do not own/operate CSO outfalls and as described in **RESPONSE 187** in Section C of the Response to Comments document, the Department modified NMC #5 for STPs as follows:

"5. Prohibition of CSOs during dry weather

a. The permittee shall operate the system in such a way that it does not cause any dry weather overflow from the collection system owned/operated by other permittees in the hydraulically connected system. ~~Since the permittee does not own and/or operate any CSO outfalls, this proposed permit action does not include the prohibition of discharges from CSOs during dry weather at this time.~~"

Please refer to **RESPONSE 197-199** of Section C of the Response to Comments document regarding the rationale for inclusion of NMC #7 (Part IV.7) in PVSC's permit.

NMC #1 – Proper Operation and Regular Maintenance Program Requirements

95. COMMENT: The first sentence references requirements to submit a Combined Sewer Overflow Pollution Prevention Plan (CSOPPP). As the connection from Elizabeth is a force main, the JMEUC does not control or influence Elizabeth's CSO outfalls nor does JMEUC own or operate any CSO outfalls. As a result, a CSOPPP should not be required. Please delete "a Combined Sewer Overflow Pollution Prevention Plan (CSOPPP) and" from the first sentence. Please also delete the text "to the CSO outfalls" from the end of this sentence.

Additionally because JMEUC does not own or operate any CSO outfalls, the requirements under this element should be limited to development of the collection system model and associated coordination with Elizabeth City for this task. [9]

RESPONSE 95: The CSOPPP information as included in the Fact Sheet is for background purposes and is stated as follows:

"Under the MGP, (a Combined Sewer Overflow Pollution Prevention Plan (CSOPPP) and a Proper Operation & Maintenance Plan and Manual is required), and consistent with state and federal regulations, (N.J.A.C. 7:14A-6.12 and 40 CFR 122.41(e)), all permittees with CSOs

were required to develop and maintain a current Operations and Maintenance (O&M) Plan and Manual for their contributory collection system to the CSO outfalls."

This language was included in the Fact Sheet for background information only where a specific CSOPPP requirement has not been included in either the Draft of Final permits. Note that there are other final requirements that relate to the same topics included under the former CSOPPP requirement; however, the permittee is no longer required to complete a CSOPPP.

96. COMMENT: The last paragraph in this section provides that the permittee shall include the capacity, dimensions, age and type of material on an updated GIS map. However, this is not required in the Specific Requirements: Narrative, Combined Sewer Management, Section D.2. The Fact Sheet needs to be updated to reflect the requirements of the Specific Requirements of the permit. [42]

RESPONSE 96: The last paragraph under NMC #1 in the Fact Sheet is stated as follows in most NJPDES CSO permits:

> "The permittee shall also provide an updated accurate characterization on a GIS map (including the capacity, dimensions, age, type of material, etc.) of the entire collection system owned and/or operated by the permittee that conveys flows to the treatment. Furthermore, the permittee shall provide for ongoing Infiltration and Inflow (I/I) reduction strategies through the identification of I/I sources and the prioritization and implementation of I/I reduction projects. The permittee shall review its rules, ordinances and sewer use agreements with its customer and/or upstream municipalities and revise if necessary to require them to identify I/I and reduce where appropriate, and to identify and eliminate interconnections and cross-connections in storm sewers. More specifically, the SOPs shall specify the operation, inspection, scheduled preventive maintenance and timely repairs required to ensure that the entire collection system conveys flows to the treatment works properly…"

The system characterization requirements of capacity, dimensions, age and type of material, along with more comprehensive requirements, are found in the NMC #1 section of Part IV entitled "Specific Requirements: Narrative," namely in section F.1.e (D.2. appears to be an erroneous reference). Additionally, Part IV.F.1.f. in the NMC #1 section states that the permittee shall delineate these requirements on a Geographic Information System (GIS) map. Therefore, the Fact Sheet section referenced by the commenter accurately reflects requirements that are found in Part IV of the permit. Further, the inclusion of this sentence was intended for informational purposes whereas the conditions in Part IV.F.1.e are the conditions that shall be followed.

Since the Fact Sheet is not part of the Final permit, this response serves to amend the administrative record.

NMC #2 – Maximum use of the collection system for storage

97. COMMENT: In consideration that the force main conveying Elizabeth's combined wastewater connects approximately 1100 feet upstream of the STP, there is no in-line storage volume available for equalization of wet weather peaks from the Elizabeth CSS. Attempting to store peak combined wet weather flow from Elizabeth downstream of the force main connection point presents a considerable risk for surcharging the upstream portion of the interceptor that serves the separately sewered communities and potentially causing SSOs or basement flooding. In consideration of the foregoing, we request that the Department modify the permit text to delete "in-line and" from the first sentence. [9]

RESPONSE 97: The Department acknowledges that site-specific factors will need to be considered in determining compliance with NMC #2, *Maximum Use of the Collection System for Storage*. Based on the National CSO Policy and N.J.A.C. 7:14A-11 (Appendix C), selection and implementation of actual control measures should be based on site-specific considerations including the specific CSS's characteristics discussed under the sewer system characterization and monitoring portions of the permit. Consistent with the EPA's CSO "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995, the permittee should consider implementing the following *Maximum Use of the Collection System for Storage* control measures:

- Inspection of the collection system that is owned/operated by the permittee to enable identification of any deficiencies that may restrict the use of the system's available storage capacity;
- Upgrade/Adjustment of pump operations at lift stations to increase pumping rates through repair, modification, or augmentation of existing equipment; and
- Maintenance activities in the collection system that is owned/operated by the permittee to remove and prevent accumulations of debris and sediment that may restrict flow.

The permittee shall include a summary of all control measures implemented under this NMCs and the effectiveness of the implemented control measures in the permittee's CSO Progress Reports within the timeframes required in Part IV, Section D.4 of the Final permit.

Additionally, the Department does not agree that the term "in-line" should be deleted from the first sentence of *Maximum Use of the Collection System for Storage* (Part IV, Section F.2. of the permit). As the second minimum control, *Maximum Use of the Collection System for Storage* means making relatively simple modifications to the CSS to enable the system itself to store wet weather flows until downstream sewers and treatment facilities can handle them; thus decreasing the magnitude, frequency, and duration of CSOs. However, any modifications considered by the permittee should be analyzed to ensure that they will not cause other problems such as street or basement flooding. The permittee should evaluate more complex modifications (e.g., those requiring extensive construction) as part of the permittee's development of its LTCP.

No changes have been made to the Final permit(s) as a result of this comment.

98. COMMENT: Does the STP notify the user member community when they are not going to take the flow? How would we know this situation was arising? [2]

RESPONSE 98: The Department believes the commenter is referring to the situation when CCMUA determines, based on the capacity of the STP, that no additional wet weather flow may be accepted. When the STP determines that they have accepted the maximum amount of wet weather flow that they can treat and still can meet all NJPDES permit limitations, the appropriate regulators will then allow additional flows to be discharged through CSO outfall(s). As required by this NJPDES permit, the public will be notified via website or hot line when such CSOs become operational either through visual observations, modeling, metering, or other appropriate methods. Using this information, the public may then correlate the CSOs activation to the STP's decision to no longer take additional flow.

Permittees within the hydraulically connected system, whose CSOs may be operational due to the STP reaching its maximum capacity, may choose to coordinate amongst themselves as to other notification procedures.

NMC #3 – Review and modification of pretreatment requirements to assure CSO impacts are minimized

99. COMMENT: The Draft permit provides that the "...permittee is to determine and prioritize the environmental impact" of its significant indirect users (SIUs). However, no basis or criteria are provided that are to be utilized by the permittee to prioritize the SIUs environmental impacts to the receiving waters due to CSO discharges. PVSC requests that the Department provide guidance on the performance and implementation of this characterization and prioritization. [42]

100. COMMENT: The content of this section should be limited to the requirements for JMEUC. As a result, the second and third sentences should be deleted. In addition, the last sentence states that JMEUC…"shall require that SIUs investigate ways to minimize their discharges to the greatest extent practicable during wet weather periods." At the current time there is no mechanism in place to enforce such restrictions. The legal basis for requiring SIU measures "to the maximum extent practicable" is not apparent and should be clarified by the Department. Further clarification and legal consultation will be necessary to evaluate the impacts on the SIUs and to determine whether such requirements would cause these sewer users to relocate outside of the sewer district to avoid the loss of revenue or other potential impacts to their business operations. The potential negative impacts to the local economy will also need to be considered. [9]

RESPONSE 99-100: Regarding the section of the Fact Sheet referenced in the first comment, this section reads as follows:

"…Under this proposed permit action, the CSO permittee is required to determine the locations of Significant Indirect/Industrial Users (SIUs) as it relates to the locations of its CSO outfalls, and the discharge nature of the SIUs for the entire collection system which is owned and/or operated by the permittee. Furthermore, the permittee is to determine and prioritize the environmental impact of these SIUs by CSO outfall and include this information in the characterization portion of its Operation & Maintenance Program. For

delegated STPs, the permittee shall require that SIUs investigate ways to minimize their discharges during wet weather, and where necessary, establish agreements with SIUs or enact ordinances or rules specifying that the SIUs should restrict discharges to the greatest extent practicable during wet weather periods."

The permittee should consider volume, loading and toxicity of the discharge as well as the location(s) relative to the CSO outfall(s) of the SIUs in their prioritization of the SIU's impacts on the receiving water body. These factors can be weighed by the permittee along with consideration of the site-specific factors at the STP.

The legal authority to regulate SIU flows is described in the Federal General Pretreatment Regulations (40 CFR 403), as incorporated by reference at N.J.A.C. 7:14A-19.1(b) and 21.1(b); and the New Jersey Pretreatment Standards for Sewerage Act at N.J.S.A. 58:11-49 to 58, specifically at N.J.S.A. 58:11-56 and rules promulgated pursuant thereto, N.J.A.C. 7:14A-19 and 21.

The above notwithstanding, the Department intends to release guidance for pretreatment programs to assist local agencies and SIUs on how to regulate and minimize flows during emergency situations including relevant legal authority.

This permit requires DLAs to have their SIUs investigate ways by which they can restrict or minimize discharges during wet weather periods. SIUs shall evaluate their facilities and operations to minimize their flows which could include measures such as water conservation; alternation or reduction in operations; on-site storage; or hauling or cessation of operations in extreme emergencies.

Please refer to the revised permit language as included in **RESPONSE 154-159** and **RESPONSE 160-162** and **RESPONSE 163-166**, all of which are in Section C of the Response to Comments document, regarding additional information on NMC #3 (Part IV.F.3).

NMC #4 – Maximization of flow to the POTW for treatment

101. COMMENT: PVSC requests that the annual average flow limitation be removed to comply with the requirements of the NMCs. [42]

RESPONSE 101: The annual average flow limit in PVSC's permit is required as per the Northeast Water Quality Management Plan (WQMP). This flow limit has been included in multiple permit cycles. Please refer to **RESPONSE 3** of the Sanitary Wastewater component (Category A) of the Response to Comments document for PVSC NJ0021016. Note that the Sanitary Wastewater Response to Comments document is included in the PVSC permit and is separate from this Combined Sewer Management (CSM) Response to Comments document.

NMC #5 – Prohibition of CSOs during dry weather

There were no comments submitted on this section of the Fact Sheet.

NMC #6 – Control of solids and floatable material in CSOs

102. COMMENT: As we keep adding all those controls on our discharge points and treatment, we're creating flooding and the CSO program does not consider flooding. My city can flood four to five blocks into the city at up to two feet deep. [2]

RESPONSE 102: Unfortunately flooding could be caused by many things, such as an improperly designed system, S/F controls or other related issues. The Department agrees that a properly designed and implemented LTCP should be designed to avoid and minimize upstream flooding. Options which can be explored include, but are not limited to: CSO wet weather pumps to overcome tidal and other influences; anti-clogging practices that can be implemented to keep the nets from clogging; installation of higher nets; and the conduct of more street sweeping. It is expected that when the CSO NJPDES permit requirements are fully implemented, CSO related flooding will be minimized.

NMC #7 – Implementation of Pollution Prevention Measures

There were no comments submitted on this section of the Fact Sheet.

NMC #8 – Public Notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts

There were no comments submitted on this section of the Fact Sheet.

NMC #9 – Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls

There were no comments submitted on this section of the Fact Sheet.

LTCP #1 – Characterization, Monitoring and Modeling of the CSS

103. COMMENT: The second paragraph describes the first step of LTCP development and states "This step also entails understanding the WQS as they apply to the receiving water for each CSO and how achievement of those standards will affect the choice of the CSO control measures." What water quality parameters does the Department require be addressed in the LTCP? [28] [31]

RESPONSE 103: Please refer to **RESPONSE 23-26** of Section D of the Response to Comments document for a detailed response on the issue of CSO monitoring.

104. COMMENT: This section of PVSC's NJPDES permit (NJ0021016) states that, in prior NJPDES permit actions, PVSC was required to submit a CSO Discharge Characterization Study and Overflow Model. PVSC performed this work on behalf of the CSO municipalities connected to PVSC's interceptor, with the exception of the City of Newark, which at the time

would not allow PVSC to perform this work on its behalf. The Cities of Jersey City, Bayonne and North Bergen were not included in this characterization and modeling effort. This section further provides that PVSC will be required to "...submit an updated characterization study of the combined sewer system to: establish the existing baseline conditions, evaluate the efficiency of the technology based controls, determine the baseline condition upon which the LTCP will be based and uniformly characterize the hydraulically connected system with respect to the requirement of this permit, specifically the number of events as defined in this permit."

PVSC requests that this entire section be removed from its Individual NJPDES permit. PVSC does not own and/or operate CSO outfalls and/or its technology based controls. This is a requirement for the owners and operators of those facilities and not the responsibility of PVSC. [42]

RESPONSE 104: The Department acknowledges that PVSC has completed characterization and modeling efforts for a portion of their system. This information can be considered to satisfy the requirements of the characterization, monitoring and modeling as part of the first LTCP (Part IV.G.1) as required by the Final permit. The Department maintains that it has the authority to incorporate CSO related conditions into NJPDES permits for permittees that do not own any CSO outfalls, but whose actions do have direct impact on the CSO discharges, pursuant to the National CSO Policy and the NJPDES regulations at N.J.A.C. 7:14A-11 Appendix C, Section I.F., Policy Development. This section of the PVSC NJPDES permit (NJ0021016) states that, in prior NJPDES permit actions, PVSC was required to submit a CSO Discharge Characterization Study and Overflow Model. This section further provides that PVSC will be required to "...submit an updated characterization study of the combined sewer system to: establish the existing baseline conditions, evaluate the efficiency of the technology based controls, determine the baseline condition upon which the LTCP will be based and uniformly characterize the hydraulically connected system with respect to the requirement of this permit, specifically the number of events as defined in this permit."

The Department does not agree that this section should be deleted from the Final permits. While the Department agrees that some STP permittees (e.g., JMEUC, BCUA, MCUA and PVSC) may not currently own/operate any CSO outfalls, all of the LTCP requirements have been included in all of the CSO permittee permits, whether the permittee currently owns/operates any CSO outfalls, or if they only own/operate the STP that receives flows from a CSS. Both types of permittees have a role to play in planning and implementing measures required to reduce CSOs. Please refer to Part IV.G.10 for all NJPDES CSO permits which clarifies the permittees' respective LTCP obligations. Also, see **RESPONSE 26-42** of Section A of this Response to Comments document.

LTCP #2 – Public Participation Process

There were no comments submitted on this section of the Fact Sheet.

LTCP #3 - Consideration of Sensitive Areas

105. COMMENT: PVSC requests that the Department remove this entire section from its Individual NJPDES Final permit (NJ0021016). PVSC does not own and/or operate CSO outfalls. This is a requirement for the owners and operators of those facilities and not the responsibility of PVSC. [42]

106. COMMENT: As the JMEUC does not own and/or operate any CSO outfalls, this proposed permit requirement should not apply to the JMEUC. [9]

RESPONSE 105-106: All LTCP components have been included in all NJPDES CSO permits given the need for a coordinated effort by all entities within the hydraulically connected system. Please refer to Part IV.G.10 of the Final NJPDES permit which clarifies the permittees' respective LTCP obligations, as well as above to **RESPONSE 26-42** of Section A of this Response to Comments document.

LTCP #4 - Evaluation of Alternatives

107. COMMENT: The text throughout this section references "JMEUC in conjunction with Elizabeth City" in a number of locations. As JMEUC does not own or operate any CSO outfalls, their requirements should be limited to assisting Elizabeth City on only those alternatives evaluations that would potentially impact treatment capacity and/or conveyance of peak wet weather flow to the STP from Elizabeth's Trenton Street Pump Station. For example, please revise the text of the second sentence of the first paragraph to state as follows: "Under this proposed permit action, JMEUC shall assist Elizabeth City, as appropriate, with the evaluation of a broader range…" Similar text modifications should be made throughout this section. [9]

RESPONSE 107: The Department disagrees with the requested changes. Please refer to Part IV.G.10 of the Final NJPDES permit which clarifies the permittees' respective LTCP obligations, as well as to **RESPONSE 26-42** of Section A of this Response to Comments document.

108. COMMENT: Item 1 in Section 4 of the LTCP describes the Presumptive Approach as limiting overflows to four events per year or 85% capture of the combined sewage flow/mass. This section then states that the count of overflows will be on a 60 month rolling average and that "the Department may allow up to two additional overflow events per year." Does 85% removal apply to volume or mass or both? What water quality parameters does 85% removal apply to? Does the Department's discretion of allowing up to two additional overflow events per year mean that the 60 month rolling average may be six events per year or that no single year can exceed six overflow events? [28] [31]

RESPONSE 108: Please refer to **RESPONSE 109-118** of Section D of the Response to Comments document for detailed responses on the issue of the Presumption Approach, including the removal of 60 month rolling average requirement. Please also refer to

RESPONSE 129 of Section D of the Response to Comments document regarding additional information on the 85% capture criteria within the Presumption Approach.

109. COMMENT: Item 1 in Section 4 of the LTCP describes how the Department will count overflows. This section does not recognize the impact of spatially variable rainfall on overflow frequency in hydraulically connected systems with large sewersheds. It is not unusual for small portions of large sewersheds to experience localized intense rainfall causing local overflows while other areas of the sewershed remain dry. If this were to not be considered in the number of allowable overflows or to not be considered in how overflows are counted, it would create a disincentive for hydraulically connected permittees to develop a cooperative LTCP. [28] [31]

RESPONSE 109: Please refer to **RESPONSE 109-118** of Section D of the Response to Comments document for a detailed response on the issue of measuring events for the Presumption Approach.

110. COMMENT: Only when a municipality with CSOs is contributing to a violation of the applicable WQS for the water body should the State require an LTCP to attain applicable WQS. The Draft permits for the NHSA facilities recognize this legal construct by noting that the LTCP requirements are to be based on either a presumption or demonstration approach to WQS compliance. See page 16 of 20, Section G.4.c., Long Term Control Plan Requirements. [25] [29]

RESPONSE 110: Please refer to **RESPONSE 70** of Section A of the Response to Comment document regarding the attainment of WQS.

111. COMMENT: The Presumption Approach methodology limits the period for evaluation of CSO controls to five consecutive years. Other methods may be more appropriate for performing the analysis. JMEUC would like to reserve judgment until it has evaluated its options and coordinated with Elizabeth City. [9]

RESPONSE 111: Please refer to **RESPONSE 109-118** of Section D of the Response to Comments document for detailed responses on the issue of the Presumption Approach, including the removal of 60 month rolling average requirement.

112. COMMENT: Paragraph iii in Section 4 of the LTCP states that the Presumptive Approach requirements will be satisfied if "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 in Section G.4.f.ii." Does this mean that less than 85% capture of volume or pollutant mass is acceptable if it can be demonstrated that the mass of pollutants responsible for the impairment are removed? [28] [31]

RESPONSE 112: Please refer to **RESPONSE 129** of Section D of the Response to Comments document regarding additional information on the 85% capture criteria within the Presumption Approach.

113. COMMENT: Paragraph iii in Section 4 of the LTCP states that one of the requirements of the Demonstrated Approach is "The planned control program will provide maximum pollution reduction benefits reasonably attainable." What are the criteria for reasonably attainable? Does the permit condition require that a higher degree of treatment be provided than is necessary to meet water quality objectives and designated uses? [28] [31]

RESPONSE 113: Please refer to **RESPONSE 138-139** of Section D of the Response to Comment document for detailed responses on the Demonstration Approach.

114. COMMENT: In the first paragraph of this section, PVSC requests that the Department change the last sentence to read "The control alternatives shall include: STP expansion/storage and discharge treatment and bypass of secondary treatment at the STP." Green Infrastructure, increased storage in the collection system, I/I reduction and sewer separation are not appropriate alternatives for the PVSC. These are alternatives that are the responsibility of the municipal permittees.

PVSC requests that the remainder of this section be deleted from its Individual NJPDES Final permit with the exception of the first paragraph on Page 38, regarding expansion of the STP and/or storage at the STP and the section on secondary treatment bypass at the plant. All other alternatives in this section do not apply to PVSC, and are the responsibility of the owner/operator of the CSO. [42]

115. COMMENT: JMEUC does not own or operate CSO outfalls, and therefore requirements for evaluation of green infrastructure, increased storage capacity, sewer separation and treatment of individual CSO discharges are not applicable to their collection system. JMEUC responsibilities under this permit should be limited to STP expansion, off-line storage, I/I reduction and CSO related bypasses of the secondary treatment portion of the STP. Please delete the first (Green Infrastructure), second (Increased storage capacity in the collection system), fifth (Sewer Separation) and fifth (CSO discharge treatment) bullets as they do not apply to JMEUC owned and operated facilities.

Therefore, in the first paragraph, last sentence of this section, JMEUC's responsibilities should be limited to assisting Elizabeth City with the evaluations of STP expansion/storage, I/I reduction as it relates to the separately sewered communities and bypass of secondary treatment at the STP. Please modify the text to read as follows: "The control alternatives shall include: STP expansion/storage, I/I reduction as it relates to the separately sewered communities, and bypass of secondary treatment at the STP, in accordance with the CSO Policy and applicable NJPDES rules." [9]

RESPONSE 114-115: The Fact Sheet states in part:

"The control alternatives shall include: green infrastructure, increased storage in the collection system, STP expansions/storage, I/I reduction, sewer separation, discharge treatment and bypass of secondary treatment at the STP."

All permittees are responsible for submitting a LTCP that addresses all nine elements in Part IV.G irrespective of whether the permittee owns/operates the relevant CSS infrastructure. This includes LTCP #4, *Evaluation of Alternatives*, as described in these comments. Where multiple permittees own/operate different portions of hydraulically connected CSSs, the permittees are required to work cooperatively with all other permittees in the hydraulically connected CSS. Therefore, the permittee that does own/operate the relevant infrastructure is required to prepare and provide the necessary information and cooperate with the permittees that do not own/or operate the relevant infrastructure to timely complete development of the permittees' LTCPs.

As described in **RESPONSE 26-42** of Section A of this Response to Comments document the Department has added Part IV.G.10 to clarify the permittees' respective responsibilities for preparation of the LTCP.

116. COMMENT: The basis for the effluent limitations and monitoring requirements should provide relief during wet weather conditions in accordance with the provisions for Wet Weather Effluent Limitations outlined in N.J.A.C 7:14A-13.12. As the JMEUC receives flow from a CSS, N.J.A.C. 7:14A-13.12 paragraph (a) 3 applies and should be considered in development of the CSO LTCP. In consideration of the above, JMEUC should be afforded the opportunity to evaluate an alternative with a reduced level of treatment at the STP (minimum of primary clarification, S/F disposal and disinfection) as allowed under these regulations and the National CSO Policy. See also N.J.A.C. 7:14A-11.12 (which incorporates the National CSO Policy). As these provisions directly impact the alternatives assessment for treatment of additional wet weather flow that may be conveyed by the City of Elizabeth to the JMEUC, please include the following sentence: "The following effluent limitation and monitoring requirements may be modified for wet weather conditions in accordance with N.J.A.C. 7:14A-13.12 and N.J.A.C. 7:14A-11 (which incorporates the federal CSO Policy) subject to the submission of an approvable CSO LTCP." [9]

RESPONSE 116: Pursuant to N.J.A.C. 7:14A-16.1, the permittee has the option to submit an application for a permit modification at any time. While the Final permit does not need to be changed to allow for future permit modifications, it would be premature to consider the above described permit modification prior to the permittee performing an evaluation of alternatives as per Part IV.G.4. A request for modification of wet weather effluent limitations is more appropriately addressed during the LTCP development process. Such a request will need to be submitted with the appropriate technical and legal justification.

LTCP #5 - Cost/Performance Consideration

117. COMMENT: PVSC requests that the first sentence in this section, "Under PVSC's individual NJPDES Discharge to Surface Water permit and the MGP, the permittee was

required to develop a cost and performance analysis report for specific control alternatives for each CSO" be deleted.

PVSC was not required to perform cost performance analysis for specific control alternatives at each CSO. PVSC was required to perform cost performance analysis of various STP expansion alternatives. PVSC also requests that this section be rewritten to specify what PVSC analysis is required of PVSC in this permit action. [42]

RESPONSE 117: This text was included in the Fact Sheet as a summary of the conditions under the MGP. Because PVSC does not own/operate CSO outfalls, the Department acknowledges that PVSC could not complete this requirement as included in the MGP. As a result, the Department agrees that the Fact Sheet language should be clarified where the information provided in this comment serves to update the administrative record.

Please refer to **RESPONSE 150** of Section D of the Response to Comment document which provides additional details on permit requirements for Cost/Performance Considerations as required in this Final permit.

LTCP #6 - Operational Plan

118. COMMENT: This item refers to operation of CSO Outfalls owned by Elizabeth City, and therefore does not apply to the JMEUC. Please delete the text or clarify that this provision is a requirement of Elizabeth City. [9]

119. COMMENT: PVSC requests that this section be deleted. This is not the responsibility of the PVSC; it is the responsibility of the owner/operator of the CSO. [42]

RESPONSE 118-119: The Department does not agree that deletion of these sections or text is appropriate. Please refer to Part IV.G.10 for all NJPDES CSO permits which clarifies the permittees' respective LTCP obligations as well as **RESPONSE 26-42** of Section A of this Response to Comments document.

LTCP #7 – Maximizing Treatment at the Existing STP

There were no comments submitted on this section of the Fact Sheet.

LTCP #8 - Implementation Schedule

120. COMMENT: In the first paragraph, PVSC requests the words "CSO controls" be deleted from the first sentence and that the second sentence be rewritten as follows: "The schedule may be phased and shall consider: permittee's financial capability, grant/loan availability, user fees and rate structures, funding mechanisms and resources necessary to implement an asset management plan."

The third paragraph of this section indicates that the Department is requiring a compliance schedule of 36 months to develop the LTCP. As previously discussed, PVSC requests that the Department extend this compliance schedule to EDP +59 months to alleviate the substantial burden on PVSC's ratepayers and to allow PVSC's staff the appropriate time to dedicate to the development of the CSO LTCP that will define how billions of dollars in infrastructure will be spent over the next 20 to 30 years. [42]

RESPONSE 120: The Department does not agree with this suggested change. As stated in the Fact Sheet:

> Under this proposed permit action, the permittee will be required to submit a construction and financing schedule for implementation of the LTCP CSO controls. The schedule may be phased and shall consider: addressing areas of overflows, discharges to sensitive areas as highest priority, use impairment of receiving waters, permittee's financial capability, grant/loan availability, user fees and rate structures, funding mechanisms and resources necessary to implement an Asset Management Plan.

The Department has incorporated a 59 month schedule for the LTCP for those hydraulically connected permittees who have committed to a unified LTCP in this Final permit. Please refer to **RESPONSE 55-62** of Section B of the Response to Comments document as well as the CSO Submittal Summary which describes the modified due dates for the LTCP and other associated reports.

LTCP #9 –Compliance Monitoring Program (CMP)

121. COMMENT: PVSC does not own or operate CSO control facilities. PVSC requests that the first sentence in this section be revised as follows: "Under PVSC's individual NJPDES Discharge to Surface Water permit and the MGP, the permittee was required to conduct an annual inspection of all combined sewer regulator facilities owned and/or operated by the permittee."

122. COMMENT: This item refers to inspection and monitoring of CSO Outfalls owned by Elizabeth City and therefore does not apply to the JMEUC. Please delete the text or clarify that this provision is a requirement of Elizabeth City. [9]

PVSC requests the remainder of this section be deleted in its entirety as it is the responsibility of the owner and/or operator of the CSO and not PVSC. [42]

RESPONSE 121-122: While the Department recognizes that certain components may not be owned/operated by the STP, the Department does not agree that deletion of all of these sections or text is appropriate. All permittees are responsible for submitting a LTCP that addresses all nine elements in Part IV.G irrespective of whether the permittee owns/operates the relevant CSS infrastructure. This includes LTCP #9, *Compliance Monitoring Program*, as described in these comments. Where multiple permittees own/operate different portions of hydraulically connected CSSs, the permittees are required to work cooperatively with all other permittees in

the hydraulically connected CSS. Therefore, the permittee that does own/operate the relevant infrastructure is required to prepare and provide the necessary information and cooperate with the permittees that do not own/or operate the relevant infrastructure to timely complete development of the permittees' LTCPs.

As described in **RESPONSE 26-42** of Section A of this Response to Comments document the Department has added Part IV.G.10 to clarify the permittees' respective responsibilities for preparation and implementation of the LTCP.

123. COMMENT: Please consider adding EPA's CSO Post Construction Compliance Monitoring Guidance, which can be found at http://cfpub.epa.gov/npdes/whatsnew.cfm?program_id=5. [5] [11] [24]

RESPONSE 123: While the Department agrees that guidance regarding post construction compliance monitoring is useful, this link has since expired and reverts to NPDES Home. Please note that a wide variety of NPDES links that are associated to CSO related resources are already included in Part IV, Notes and Definitions. This includes a link to the NPDES Home page which contains the post construction compliance monitoring information. In addition, the Department has since released guidance document entitled *Receiving Waters Monitoring Work Plan Guidance for the CSO Program* which is available at www.state.nj.gov/dep/dwq/cso. This guidance document provides a framework for sampling plans to satisfy ambient monitoring requirements as required by NJPDES CSO permits.

Specific Effluent Limitations

124. COMMENT: The Department is proposing an annual average flow limitation of 330 MGD for PVSC (NJ0021016). The imposition of a flow limitation is contrary to the NMCs Requirements to maximize wet weather flows at the STP. Further, other POTWs in New Jersey do not have annual average flow limitations or reporting requirements included in their NJPDES discharge permits and require reporting only of the daily average and maximum flows (examples include, but are not limited to, CCMUA, MCUA, JMEUC and BCUA). Flow is not a pollutant and therefore limitations should not be imposed upon this measurement. PVSC requests that the annual average flow limit be removed from the NJPDES Final permit. [42]

RESPONSE 124: The Department is not proposing 330 as a new annual average limit in the Final permit. This limit is based on the WQMP and has been retained in the NJPDES permit for multiple permit cycles. As this permit must be consistent with the Northeast WQMP, N.J.A.C.7:14A-15.4(b), in order to remove this limit, PVSC must request a modification to the Northeast WQMP. Please refer to **RESPONSE 2** in the Category A component of the Response to Comments on NJ0021016 for additional detail. Note that the Sanitary Wastewater Response to Comments document is included in the PVSC permit and is separate from this Category CSM Response to Comments document.

125. COMMENT: PVSC (NJ0021016) has requested a waiver of the percent removal requirements for 5-day Carbonaceous Oxygen Demand ($CBOD_5$) and Total Suspended Solids

(TSS) in accordance with N.J.A.C. 7:14A-12.3(b) and (c). The Draft permit provides: "This regulation allows the removal or imposition of a less stringent limitation when a domestic treatment works receives less concentrated influent wastewater during wet weather or for dry weather...." The Draft permit further provides that the EPA has determined that the "...85% removal limitation can be waived during wet weather flows only." This is contrary to what is allowable under the regulation. The regulation only allows a waiver of the requirement, which is a monthly average limitation, not a daily limitation, or the establishment of a less stringent limitation.

The Draft permit further provides that the EPA does not believe that PVSC treats "...to unreasonably low concentration levels during dry weather conditions." What is the EPA's definition of "unreasonably low concentrations"? The New Jersey Administrative Code defines "significantly more stringent effluent limitations" as being more than 5 mg/L less than the permit limit concentration. PVSC's permit limitations are 30 mg/L monthly average TSS and 25 mg/L monthly average CBOD5. PVSC must consistently have effluent concentrations below 25 mg/L monthly average TSS and 20 mg/L monthly average $CBOD_5$ to meet the 85% removal requirement and has demonstrated this through its waiver applications. [42]

RESPONSE 125: Please refer to **RESPONSE 3** in the Response to Comments document for Category A of the PVSC Individual NJPDES Permit NJ0021016. Note that the Sanitary Wastewater Response to Comments document is included in the PVSC permit and is separate from this Category CSM Response to Comments document.

126. COMMENT: Minimum percent removal rates for BOD and TSS are typically waived in many states during periods of peak wet weather flow for those POTWs receiving combined sewage. In the interest of moving forward with a cooperative effort, these provisions should be incorporated into JMEUC's permit for the purposes of reducing the risk to JMEUC for maximizing the conveyance and treatment of combined sewage from the Elizabeth CSS. Please consider adding the following text as a footnote to the Permit Summary Table on pages 18 and 19: "The permittee is not required to calculate percent removal on days when daily average flows exceed the permitted design flow." In consideration of the foregoing, JMEUC plans to submit a formal waiver request on the 85% minimum percent removal requirements. [9]

RESPONSE 126: A decision cannot be made regarding the revision of percent removal limitations until the Department receives a formal percent removal waiver request along with the necessary legal and technical supporting justification for the JMEUC (NJ0024741). Regarding the addition of a footnote, no change will be made to the permit as a result of this comment since the JMEUC has not submitted a formal percent removal waiver request.

Contents of the Administrative Record

127. COMMENT: Each Permit lists the studies that each municipality has performed in prior permits. For various reasons, many of these reports may now only be available from the Department. The Department should make these reports available to all parties at no cost, and

without the need to submit a request under the New Jersey Open Public Records Act or the common law. Further, the reports should be made readily available in an electronic format. [42] [44]

RESPONSE 127: All studies listed in the permits are available for review as they are part of the administrative record which is on file at the offices of the Department, located at 401 East State Street, Trenton, New Jersey. It is available for inspection, by appointment, Monday through Friday, between 8:30 A.M. and 4:00 P.M. Appointment for inspection may be requested through the Open Public Records Act office. Details are available online at www.nj.gov/dep/opra, or by calling (609) 341-3121. Please note that there is no cost to review the file but there is an associated cost for any copies that are requested.

Most studies are not currently available in electronic format since they are typically submitted on paper (hard copies). However, please note that any future studies that are submitted electronically will be made available for review, and when electronic copies are requested they may be provided at no cost.

128. COMMENT: Page 35 of 36, Rules and Regulations: Requirements within the Delaware River Basin Commission (DRBC) Administrative Manual are not applicable to the JMEUC and should be deleted from the list of applicable rules and regulations. [9]

RESPONSE 128: The Department agrees that the DRBC regulations should not have been cited in the Contents of the administrative record for JMEUC since it is not within the Delaware River watershed. However, the Fact Sheet is not part of the Final permit. Therefore, this response serves to amend the administrative record.

Maps and Schematics

129. COMMENT: For the NHSA River Road Facility (NJ0025321), the Fact Sheet indicates that the CSO-related flows and the STP flow are combined, both exiting Outfall 001 (River Road Fact Sheet, pages 26-27). An updated schematic has been provided as an attachment where the CSO Flow has been inserted on the schematic. [25]

RESPONSE 129: The Draft permit language on pages 26 and 27 of NHSA River Road STP's Fact Sheet explains that the CSO flow discharged from NHSA River Road CSO outfall 002 is ultimately discharged out the same outfall pipe as the STP outfall 001, although the 2 wastestreams have different outfall designators. This referenced schematic that was included in the Draft permit was to reflect the STP processes, not the CSO information. Further, the schematic submitted with the comments on the Draft permit does not accurately denote the separate outfall designators. This information will be more accurately represented as part of the requirements concerning the updated characterization of the entire collection system as included as part of the O & M Program and corresponding Manual in accordance with Part IV.F.1.e.iii of the permit.

130. COMMENT: The facility schematic that was included with the Fact Sheet for JMEUC indicates that three discharge locations are presently available, yet the Fact Sheet indicates that only one is authorized. The schematic indicates that there is:

(1) An emergency discharge to the Elizabeth River after primary treatment and disinfection
(2) Discharge to Arthur Kill in a pipe parallel to the main discharge after primary treatment and disinfection; and
(3) Main discharge to the Arthur Kill after treatment and disinfection/dechlorination.

These existing outfalls provide an option to immediately implement increased wastewater processing and reduce untreated/undisinfected CSOs for Elizabeth City. It would seem both reasonable and appropriate for the Department to allow such increased discharge, under existing regulatory requirements, in the following fashion:

- Determine that discharge to Elizabeth River is allowable but only in accordance with state emergency discharge (bypass) provision compliance. This provision was utilized for Rahway Valley SA in 2009 to allow such discharges to occur, without violating state law, if the terms of the NJ regulation was met (N.J.A.C. 7:14A 6.3 and 6.10).

- Allow the discharge of wastewater from outfall 002 to the Arthur Kill as a temporary CSO bypass, which will be eliminated as the various flow reduction components of the LTCP are implemented by the outlying jurisdictions. This will reduce untreated CSO discharges while LTCP implementation is underway

- Combine the existing 002 and 001 discharges for full disinfection and dechlorination and then discharge the combined flows out both existing outfalls, in full compliance with the existing NPDES limitations. There is legal precedent such as the *Iowa League of Cities v. EPA* case that this does not constitute a bypass under either state or federal law.

Each of these options has the potential to provide immediate environmental and public health benefits to the local community, in accordance with the National CSO Policy. As necessary, the Department could grant a waiver to NJ rule (N.J.A.C. 7:14A-23.13(m)) that addresses facility design to accomplish this goal. We request the Department's input and evaluation of these issues and treatment increase options prior to issuing the Final permit. [9]

RESPONSE 130: An evaluation of alternatives as to how to address CSOs is best addressed in development of the LTCP. While the Department appreciates that options are provided via comments on the JMEUC permit, it would be premature to judge the merits of these alternatives without consideration of the remaining portions of the LTCP and other regulatory requirements.

Part I: General Requirements: NJPDES

131. COMMENT: EPA states that a reopener clause should be added to the permits as required by the National CSO Policy, which states [that a Phase II permit should contain] "A reopener

clause authorizing the NPDES authority to reopen and modify the permit upon determination that the CSO controls fail to meet WQS or protect designated uses. Upon such determination, the NPDES authority should promptly notify the permittee and proceed to modify or reissue the permit. The permittee should be required to develop, submit and implement, as soon as practicable, a revised CSO control plan which contains additional controls to meet WQS and designated uses. If the initial CSO control plan was approved under the demonstration provision of Section II.C.4.b., the revised plan, at a minimum, should provide for controls that satisfy one of the criteria in Section II.C.4.a. unless the permittee demonstrates that the revised plan is clearly adequate to meet WQS at a lower cost and it is shown that the additional controls resulting from the criteria in Section II.C.4.a. will not result in a greater overall improvement in water quality." [11] [24]

RESPONSE 131: A reopener clause pursuant to N.J.A.C. 7:14A-6.2(a)10 was included in Part I of the Draft permits. Under Part I, Section A.1.a., of the Final permits, this reopener clause states:

> "The permittee shall comply with all conditions set forth in the final permits and with all of the applicable requirements incorporated into the permits 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."

Although the National CSO Policy and N.J.A.C. 7:14A-11, Appendix C Section IV, B.2.g. contemplates that the requested reopener clause be included in an appropriate enforceable mechanism as soon as practicable once the permittee has completed development of the LTCP, the Department agrees with the request to include a reopener clause specific for NJPDES CSO permittees in the Final permits. This reopener clause serves to acknowledge that some LTCPs may be in the process of being implemented, but still fail to meet their water quality goals prior to the next permit issuance. The reopener clause has been developed based on the National CSO Policy and has been added to Part II.C as follows:

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

This required language has been added to Part II, Section C (CSO Reopener Clause) of the Final permits.

Part II: General Requirements: Discharge Categories

132. COMMENT: Part II.A.1.a states that additional requirements are incorporated by reference, in particular, the State's WQS regulations in N.J.A.C. 7:9B and the WQMP rules. This requirement is not appropriate as it would require immediate compliance with applicable WQS, even though such compliance is intended only after LTCP activities are completed (i.e., years in the future). Given this provision, any new requirement set forth in the WQS rules could

place the discharger in immediate non-compliance. This is inappropriate as schedules of compliance are intended to apply to new WQS rules. Also, the inclusion of the WQMP rules, which are not NPDES requirements, cannot be used to trigger NPDES violations. See 40 C.F.R. § 123.1(i). This incorporate by reference is inconsistent with the CWA Permit Shield. We request that this provision be deleted for the reasons stated above. [25] [42]

RESPONSE 132: With respect to inclusion of the reference to the SWQS and WQMP regulations, the Department is required to incorporate these requirements into the permits either expressly or by reference in accordance with 40 CFR 122.41 and N.J.A.C. 7:14A-2.3.

No changes have been made to the Final permit(s) as a result of this comment.

133. COMMENT: For Part II.B.2.b. PVSC requests that this requirement be revised as follows: "Submit a complete permit renewal application: 180 days before the Expiration Date, unless the Department authorizes a later date, not to exceed the expiration date of the permit." [42]

RESPONSE 133: Pursuant to N.J.A.C. 7:14A-4.2(e)(3) any person (permittee) planning to continue discharging after the expiration date of an existing individual NJPDES permit shall file an application for renewal at least 180 calendar days prior to the expiration of the existing permit. N.J.A.C. 7:14A-4.2(e)(3) further provides three exceptions to the 180-day deadline, one of which must be satisfied in order for the Department to authorize discharge after the expiration of the individual permit. Because the underlying regulation for this requirement provides an allowance for an extension, the Department maintains that the suggested language is unnecessary.

No changes have been made to the Final permit(s) as a result of this comment.

134. COMMENT: Part II.B.7.a.(b), Revise "condtion" to "condition." [42]

RESPONSE 134: The Department has corrected the typographical error in Part II.B.7.a.(b) in all final NJPDES CSO permits.

Part III: Limits and Monitoring Requirements

135. COMMENT: Please incorporate the following changes to the NJPDES permit for the City of Elizabeth: The location description for Monitored Location 008A CSO should read “Grand St/Price Street”; Monitored Location: 031A CSO (Page 18 of 29) – “Front St” should be capitalized in the location description; and Monitored Location: 040A CSO (Page 26 0f 29) – A “/” should be placed between Pulaski St. and Clifton Street in the location description. [12]

RESPONSE 135: The Department has made the requested changes to Part III of the Final NJPDES permit to correct the Location Description language for Monitored Location 008A, to correct the typographical error in the Location Description for Monitored Location 031A, and to add a “/” between Pulaski St. and Clifton Street in the Location Description for Monitored

Location 040A. **These changes have been incorporated into the final NJPDES CSO permit for the City of Elizabeth (NJ0108782).**

136. COMMENT: The Department needs to clarify whether a rain gauge representative of the area refers to a regional gauge such as the National Oceanic and Atmospheric Administration (NOAA) Station at Newark Airport, or whether a local rain gauge needs to be installed and maintained. [19] [25] [26]

RESPONSE 136: In order to properly correlate and understand the relationship between precipitation events and the hydraulic responses of the permittee's existing CSS to such events, it is important that the location of the rain gauge(s) be representative in accordance with N.J.A.C. 7:14A-11-Appendix C, Section II, C.1.a., and EPA's CSOs "Guidance for Monitoring and Modeling" (EPA 832-B-95-002) dated September 1995. The CSO Guidance provides that "Rain gauges should be spaced closely enough that location variations in storm tracking and storm intensity does not result in large errors in estimation of the rainfall within the CSS area." While smaller CSS systems may be adequately represented by a single, well-located gauge; larger CSS systems would greatly benefit from a network of rain gauges. Rain gauges located at the local/regional STP and/or nearby airport would be considered to be good locations. The Department considers rain gauges located within the CSS as being "representative of the area."

No changes have been made to the Final permit(s) as a result of this comment.

137. COMMENT: During one of the Pre-draft meetings on the manner or methodology intended for reporting of discharges at each outfall, the Department indicated that this information could be based on the output from the computer model developed under the LTCP. This is not however practical since running these models requires an area of expertise not available to the permittee. Other methods could possibly be developed such as a probability graph(s); however these will not have the accuracy of the model. It is illegal for a licensed operator to provide or report false or inaccurate information in the discharge monitoring report (DMR). Therefore DMR forms need to acknowledge that there is uncertainty in the information that is being provided by the operator on the number of discharges per outfall per month.

It is recommended that the permit include the following at the end of the comment for each outfall: "…, and Duration of Discharge shall be "estimated and" reported …" [19] [25] [26]

138. COMMENT: The DMR requires the duration of the discharge from each CSO outfall to be reported as a whole day for any day when a discharge occurs. First, any discharge should be reported for the estimated time period for which it occurred instead of for the whole day. Second, any discharge which is part of a larger, single event expanding several days should be reported as one single discharge. [14] [25]

139. COMMENT: The DMR requires the duration of discharge/event from each CSO outfall to be reported as a whole day for any day when a discharge occurs. Using this definition will tend to overstate the number of overflow events since any discharge that extends past midnight

from one day to the next needs to be reported as two days of discharge from the CSO. Instead of reporting on days with discharges, it is recommended that the estimated number of CSO events be reported for each CSO outfall.

The definition of an "event" should be similar to the definition as established in CSM Part IV.G.4.i., which would state: "An event is defined as any discharge from an outfall, however, multiple periods of discharge from one outfall are considered a single event if the time between periods of overflow is no more than 24 hours." [19] [26]

140. COMMENT: In the absence of monitoring instruments, the City of Camden may propose to utilize # of days as the unit for reporting duration of discharge. Another option would be to use existing computer modeling of the combined system to model the effects of each rainfall to determine the duration of a CSO event. One additional option would be to utilize floats in each structure and cell phone technology to record each event. [14] [27]

141. COMMENT: The proposed permit requires NBMUA to monitor and report the duration of discharge (number of days per month), the recovered S/F (cubic yards per month), and precipitation (inches per month) for CSO 004A. The Part IV Specific Requirements: Narrative Combined Sewer Management Section A.1.c, page 4 of 22, further clarifies: "Discharges shall be directly monitored or predicted using a DEP approved up-to-date model." Currently, there is no overflow monitoring meter in place. Also, there is no Department approved model for this system that can predict the number of days per month on which CSO discharge occurs. NBMUA will not be able to install an overflow monitoring meter or develop a Department approved model prior to the EDP. Therefore, we request that the CSO discharge reporting not be required before EDP +6 months. The City of Perth Amboy will experience operational difficulty in complying with this requirement. [14] [34]

142. COMMENT: The proposed permit requires NBMUA (within the PVSC sewer service system) to monitor and report the duration of discharge (number of days per month) for all nine CSOs, and the recovered S/F (cubic yards per month) and precipitation (inches per month) for CSO 003A. NBMUA will not be able to install overflow monitoring meters or develop a Department approved model prior to the EDP. Therefore, we request that the CSO discharge reporting not be required before the EDP +12 months. [33]

143. COMMENT: The City of Paterson will not be able to install overflow monitoring meters or develop a Department approved model prior to the EDP. Therefore, we request that the CSO discharge reporting not be required before EDP +12 months. [40]

RESPONSE 137-143: Part IV.C.1.d. of those NJPDES permits that own/operate CSO outfalls require permittees to report the "Duration of Discharge" on the MRF for each CSO outfall as a "whole day", for any calendar day when a discharge occurs. In Part III of the Draft permits, this same reporting language is repeated for each Monitored Location under the "Comments" section. The "Duration of Discharge" reported in Part III is not a measure of "events" as defined in Part IV.G.4.f.i. of the Draft permits. Rather, this method of reporting is required simply to provide the Department (and the public) with an estimate of the level of

CSO discharge activity at each of the permittee's CSO outfall locations. This information is not to be used for LTCP compliance evaluation.

Given the fact that the Department intends for "Duration of Discharge" to simply be an estimate as evidenced by the reporting parameter "# of days", the Department maintains that inclusion of the word "estimated" in the Final permit is appropriate and has incorporated this change into the final CSO permits. Additionally, permittees are required to certify their MRFs in good faith and to the best of their knowledge. By reporting the Duration of Discharge as "# of days", the permittee will be meeting the Department's intent and expectations regarding accuracy.

The Department agrees that it indicated that this information could be based on the output from computer modeling developed under the LTCP. The Department understands that when properly calibrated and validated, computer models provide an acceptable mechanism for making this determination; however, the permittee is not limited to using computer modeling to satisfy this requirement. The permittee may find other alternatives that better address its site-specific circumstances for which the Department can be consulted.

For permittees who are using a comprehensive model that correlates CSO discharge occurrences with rainfall amounts, a chart may then be developed which correlates rainfall amounts to CSO discharges. For MRF submittal purpose, the permittee may simply determine the rainfall gauge information and use the chart to correlate the associated CSO discharge. This data may be submitted on the MRF. The Department does not expect the permittee to run continuous models for this purpose.

For permittees with few CSO outfalls, simple visual observations (through the use of chalk lines, tethered wooden blocks, or by directly witnessing a discharge) by representatives of the permittee during/after periods of precipitation may be adequate to comply with this requirement. However, for permittees with many CSO outfalls, it may be necessary to make this determination through the use of: computer modeling, monitoring instruments (floats, sensors, etc.,), or through other statistical or physical means. Further guidance regarding methods to detect CSOs can be found in the EPA's CSO "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995. Many of these techniques are low cost, simple to install, and should not take beyond the established permit time frame to implement.

As described in the next response and in the CSO Submittal Summary, the Department is providing a compliance schedule for the "Duration of Discharge" where this information need not be reported until EDP +6 months.

This change affects Part III for the CSO outfalls where the term "estimated" has been included and two phases have been included for "Duration of Discharge."

144. COMMENT: Certain of Newark's CSO Outfalls provide S/F control through the use of mechanical screens with the S/F collected being returned to the PVSC Interceptor as approved by the PVSC and NJDEP. This volume of S/F removed from the CSO are not measured,

weighed or calculated and therefore cannot be reported in the monthly MRF. Please modify the permit to reflect this monitoring limitation. [35]

RESPONSE 144: Part IV.C.1 requires the permittee that own/operates CSO outfalls to report the total volume of S/F removed from ALL outfalls on the MRF for the first CSO outfall, only when the S/F solid waste is measured for disposal. The Department is not looking for the quantity of S/F to be reported individually for each CSO outfall in this permit but rather is looking for a summation from all outfalls. For those outfalls with mechanical bar screens that return the captured screenings back into the wastewater flow to be removed downstream at the STP, the permittee will not be collecting, measuring or weighing these screenings for disposal; therefore, the permittee will not be required to report the quantity of captured screenings from those units on the monthly MRF. For those months where no S/F are disposed of, the permittee shall report "CODE = N" on the MRF as indicated in Part IV.C.1. In addition, as discussed in **RESPONSE 40** of Section B of the Response to Comments document, the Department is only requiring reporting as volume (cubic yards) as opposed to volume and weight. The Department recognizes that some of the NJPDES CSO permits erroneously indicate that the permittee shall report "NODI" in CSM Part IV.C.1 as opposed to "CODE = N" where these errors have been corrected.

This change affects Part III of those CSO permits where CSO MRFs are required.

Section B – CSM Part IV Notes and Definitions, Parts A, B, C, D, E

Part IV Combined Sewer Management, Notes and Definitions

1. **COMMENT:** Part IV.A.1 of NJ0024741 states: "The permit conditions in CSO section apply only to combined sewer system and related discharge." What does this mean with respect to compliance responsibilities under this permit? Is JMEUC a "related discharge" such that the entire section applies? It can be presumed that the term "permittee" in the permit provisions is intended to mean JMEUC, but JMEUC is not a "CSO discharger" nor does JMEUC own or operate such discharges.

   As per the NPDES regulations (40 CFR 122.21(b)), only the owner or operator of a discharge can receive requirements under NPDES permitting. The scope of the applicability of the overlapping permit provisions needs to be clarified to ensure that the correct permittee has the capability of addressing and complying with the permit provisions related to CSOs. This is described in an attachment to the comments document entitled "Federal State Provisions Applicable to Owner-Operators." [9]

2. **COMMENT:** Regarding Part IV.A.1, please explain what a "related discharge" would be to ensure that NHSA understands the scope of this provision. [25]

   RESPONSE 1-2: The commenter is correct in that Part IV.A.1.a of NJPDES permit NJ0024741 states:

"a. The permit conditions in the CSO section apply only to the combined sewer system and related discharges."

This language was included in those NJPDES CSO permits for which there was both a CSM category as well as a Sanitary Wastewater (A) category. The intent of this language is to simply differentiate that the Category Combined Sewer Management (CSM) conditions apply to the CSS where related discharges are intended to mean discharges of untreated combined sewage. The Category A conditions apply to the sanitary wastewater discharge from the STP. By way of comparison, any NJPDES CSO permits that do have CSO outfalls but are not STPs (e.g. municipalities) do not have this same language because they do not have a sanitary wastewater of discharge component. The Department maintains that this language conveys the Department's intent and that no modification to the language is necessary.

3. COMMENT: We request that "and the CSOs" in condition C.1, items C.5 through 9 of the NMCs, and items D.3 and 9 of the LTCP requirements, all be deleted from the permit since our facility does not own or operate CSO outfalls. It is requested that the Notes and Definitions Section relating to CSM be removed from the permit. [17] [42]

4. COMMENT: EPA suggests including additional definitions that are not defined and which do not appear to be incorporated by reference. We also suggest inserting and abbreviation/acronym table. For example, we did not see a definition of RWBR (reclaimed water for beneficial use) and "QL" (quantification level). [5] [11]

RESPONSE 3-4: The Department maintains that inclusion of the Notes and Definitions relating to CSM is appropriate and integral to understanding other portions of the permit. Although a permittee may not own/operate all of the particular components of a CSS, all of the permittees that have been issued these CSO permits do own portions of a CSS POTW, whether it is only one CSO outfall, or the STP that receives the combined sewage from the contributing municipalities. Please refer to **RESPONSE 26-42** of Section A of the Response to Comments document.

A complete list of acronyms has been included in the Response to Comments document which is part of the Final permit.

While a table has been added to this Response to Comments document, no changes have been made to the conditions of the Final permit(s) as a result of these comments.

5. COMMENT: JMEUC and NHSA note that several sections from Part IV-Specific Requirements: Narrative for Sanitary Wastewater address obligations raised in the CSO Management section with respect to the NMCs or LTCP requirements that involve operations at the STP. Duplicative provisions should be removed from the permit to avoid confusion. [9] [25]

RESPONSE 5: The Department disagrees that any of the requirements of the Sanitary Wastewater section of the permit suffice to address the STP permittees' CSM requirements with respect to the NMCs or the LTCP. The Department also disagrees that the sections are

duplicative. The requirements in the Sanitary Wastewater section are included to apply to the STP requirements from the State and Federal NJPDES/NPDES regulations for STP discharges to surface water.

No changes have been made to the Final permit(s) as a result of this comment.

6. COMMENT: The definition of a dry weather overflow ("DWO") exceeds the intent within the National CSO Policy and could result in violations for discharges (i.e. ground water or tidal infiltration) that do not impact compliance with the CWA and were not anticipated, nor included in the Policy:

1. The National CSO Policy states that the (Policy):
   a. Introduction: A. Purpose and Principles: …To ensure that if CSOs occur, they are only as a result of wet weather; and
   b. Introduction: B Application of Policy… Discharges from CSSs during dry weather are prohibited by the CWA.
   c. EPA Objectives for Permittees. Nine Minimum Controls are…Prohibition of CSOs during dry weather.

2. The National CSO Policy provides the following definitions:
   a. A combined sewer system (CSS) is a wastewater collection system owned by a State or municipality…which conveys sanitary wastewaters...and storm water through a single-pipe system to a Publicly Owned Treatment Works Treatment Plant.
   b. A CSO is the discharge from a CSS at a point prior to the POTW Treatment Plant…CSOs consist of mixtures of domestic sewage, industrial and commercial wastewaters, and storm water runoff.

The National CSO Policy prohibits dry weather CSOs. Based on the EPA definitions, flows into the outfall pipe downstream of the CSS do not represent a CSO discharge since the discharge must be from the CSS and the CSS is that which conveys wastewater to the POTW. By definition the outfall itself is not part of the CSS and thus discharges that originate directly into the outfall, which does not include domestic sewage, industrial and commercial wastewater, and storm water runoff, are not by definition a CSO discharge. It is recognized that illicit connections and/or dewatering discharges into the outfall pipe are not covered under the CSO definitions as noted above. Thus the definition needs to be expanded, but not to the extent indicated. It is therefore recommended that the definition of a DWO as noted above should be modified from the current definition to: "….DWO's can include flows from one or more of the following: domestic sewage, commercial and industrial wastewaters, and/or other dry weather pollutant loads regulated under the CWA." [19] [26]

7. COMMENT: Section 1.B of the National CSO Policy ("Application of Policy") defines Dry Weather Flow as "flow in a combined sewer that results from domestic sewage, groundwater infiltration, commercial and industrial wastewaters, and any other non-precipitation related flows (e.g., tidal infiltration)." It does not include "and/or any connections downstream of the regulator to the outfall pipe" as has been added to the Draft permit. This additional language must be removed as it will classify any flow from the end of the outfall as a DWO when in fact

they are not a DWO. For example, existing storm water connections to the outfall downstream of the regulator should be permitted to remain because removal, treatment or monitoring of those connections is not required as they are not an overflow from the CSS but only from the outfall pipe. In addition, new connections downstream of a regulator should not be considered a DWO if approved by the Department for certain activities, such as groundwater from construction projects or new storm connections.

In addition, because certain CSO outfalls are submerged or partially submerged and the tide gates are not located at the end of the outfall but rather at some distance from the end of the outfall pipe, they may be subject to tide water level changes and an outfall may appear to be discharging during dry weather when it is in reality the exit of tidal flow. Most control, flow measurement or monitoring devices are placed in the regulator and not at the end of the outfall pipe. Therefore the determination that a DWO is or is not occurring should be observed or measured at the regulator or other wet weather overflow control point, not the end of the outfall pipe. [35]

8. COMMENT: The definition of a "DWO" exceeds what EPA intended to be controlled in its National CSO Policy. The definition as written could result in violations for discharges (*i.e.*, ground water or tidal infiltration) that do not impact compliance with the CWA and were not anticipated to be covered by the National CSO Policy. For example, flows into the outfall pipe downstream of the CSS do not represent CSO discharges since the discharges must be from the CSS and the permit should reflect this. [25] [35]

9. COMMENT: Outfall pipelines experience the same types of infiltration as other sewer lines, and historically storm sewers have been connected to CSO outfalls downstream of CSO regulators. The definition of DWO should be modified by deleting "infiltration" from the listing of prohibited DWO flows that occur after a CSO regulator, "flows" from existing storm sewers connected to a CSO outfall downstream of a regulator, and "and any other non-precipitation related flows (e.g., discharge of tidal infiltration and/or any connections downstream of the regulator to the outfall pipe). It is also suggested that the phrase "unless approved by NJDEP" be inserted after "…to the outfall pipe." [42] [44]

10. COMMENT: Can the Department make a determination as to whether the discharge of groundwater infiltration as a result of leaking pipe joints downstream of a regulator is an unacceptable dry weather condition? [12]

RESPONSE 6-10: The National CSO Policy, N.J.A.C 7:14A-11 (Appendix C) and the NJPDES permit requirement under the NMC #5 prohibit CSOs during dry weather. As stated in the Fact Sheet:

> "Under the MGP, dry weather overflows (DWOs) are prohibited from any CSO outfall. Under this proposed permit action, this requirement is continued and the permittee is required to inspect the combined sewer system as part of its Operation & Maintenance Program to ensure there are no DWOs. Additionally, 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."

The Department does agree that modifications to the DWO definition are appropriate. As a result, the Department has modified the definition of DWO in Part IV.B.1.a as follows:

"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 ~~can~~ include the following flows ~~from one or more of the following~~: domestic sewage, ~~ground water infiltration,~~ dewatering activities, commercial and industrial wastewaters, ground water and tidal infiltration upstream of the regulator, and any other non-precipitation event related flows ~~(e.g., discharge of tidal infiltration and/or connections downstream of the regulator to the outfall pipe)~~ 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."

The Department maintains that the prohibition of non-precipitation event related flows is appropriate and has therefore included such in the DWO definition. Regulators are designed to let excess flow, which is a mixture of stormwater and sanitary wastes, to overflow to the surface water body. If a discharge is downstream of the regulator, it will not be conveyed to the STP. There are signage requirements for the outfall to direct the public how to report DWOs. Neither the Department nor the public would be able to discern the source of the discharge and thereby determine if it is a DWO. On a case-by-case basis, the Department may approve certain discharges on a temporary basis which could include a connection downstream of the regulator. Extraordinary circumstances could include a situation where there is no feasible alternative discharge location.

Connections of storm sewers downstream of a regulator would not be considered a DWO inasmuch as a discharge only occurs during wet weather. However, the permittee may choose to reroute such outfalls if necessary under the LTCP to reduce the number of events, if required.

This change affects Part IV.B.1.a of the Final permits.

11. COMMENT: The Department should provide clarification regarding whether or not a CSO as a result of snow melt is considered DWO. If it is, how is the time period for the snow melt to be considered? If CSO caused by snowmelt is considered a DWO, should we start reporting these events as DWO? [27]

RESPONSE 11: As stated in the DWO definition found in Part IV – Notes and Definitions, snow melt is considered to be a precipitation event and the resulting discharge would not be considered a DWO. Because snow melt is considered to be within the definition of a

precipitation event, non-compliance reporting of a DWO resulting from snow melt is not required. It is not appropriate to expand upon the definition of DWO to mandate a specific timeframe for snow melt because snow melt will be dependent on the ambient temperature in an area. Additional information regarding snow disposal and removal can be found at http://www.nj.gov/dep/dwq/pdf/snow_removal.pdf.

No changes have been made to the Final permit(s) as a result of this comment.

12. COMMENT: Connections downstream of a regulator are prohibited unless approval is granted by the Department for certain activities, such as groundwater from construction projects. Therefore, the definition of DWO should be revised to insert "unless approved by NJDEP" after "... to the outfall pipe" [15] [20] [40]

13. COMMENT: Modify the definition of DWO to permit certain discharges to be connected to the system downstream of the regulator, with the approval of the Department. [32]

RESPONSE 12-13: The Department agrees with the suggested changes, and has revised the definition as shown in **RESPONSE 6-10** of Section B of this Response to Comments document.

This change affects Part IV.B.1.a of the Final permits.

14. COMMENT: This definition of Green Infrastructure (GI) should also include methods that store and slowly release stormwater to reduce its volumetric rate of flow during a rain event, including blue roofs, rain barrels, cisterns, seepage pits and ground water infiltration, etc. PVSC suggests that this definition be removed from those NJPDES CSO permits that do not own/operate CSO outfalls. [6] [15] [20] [32] [35] [40] [42] [44]

RESPONSE 14: Part IV.B.1.b contains the following definition for Green Infrastructure:

> "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."

The Department states the following in the Fact Sheet within the Evaluation of Alternatives section with respect to GI:

"- Green infrastructure which allows for stormwater management close to its source, providing both water quality treatment and some volume control. The volume that is retained onsite and kept out of the sewer system can help delay expensive gray infrastructure maintenance and upgrades. Some examples of green infrastructure measures include, but are not limited to, pervious pavements, street bump-outs, rain gardens, and tree trenches."

These are a few examples of GI practices that the Department referenced in the definition. There are in fact many other GI practices that can be implemented in the LTCPs. Because the definition included the phrase "includes but is not limited to" the intent of this comment is met. The Department also maintains that inclusion of this definition is appropriate for those permittees that do not own/operate CSO outfalls as it is a definition and not a requirement. The Department believes no further changes are necessary.

No changes have been made to the Final permit(s) as a result of this comment.

15. COMMENT: The definition of "Hydraulically connected system" allows for segmenting large systems into smaller systems on a case by case basis. Kearny's dry weather flow is discharged to PVSC which discharges to the Upper NY Harbor and Upper Newark Bay; however, some of Kearny's CSOs discharge to Franks Creek. Fort Lee's dry weather flow is discharged to BCUA which discharges to the Hackensack River along with several CSO from communities in BCUAs service area. However, Fort Lee's CSOs discharge is to the Hudson River.

Is this justification for these outfalls to be separated from the PVSC's and BCUA's hydraulically connected system? If hydraulically connected systems are segmented into smaller systems does the Presumptive Approach limit of four overflows per year apply to the entire system or to each individual subsystem? Can the Presumptive Approach be used for some hydraulically connected systems and the Demonstration Approach be used for other parts of the system that are deemed to not be hydraulically connected? [28] [31]

16. COMMENT: The regulatory definition of "Hydraulically connected system" has not been developed to address the specifics of Kearny's situation namely that Kearny's CSOs discharge into two separate waterbodies, the Passaic River and Frank's Creek. How can the Town of Kearny select and develop the approach with respect to hydraulically connected systems without specific application of these and other particulars associated with the definition of a hydraulically connected system? The phrase "case by case basis" that is included in the definition of hydraulically connected system is a variance with the very nature of the individual permit and should be addressed by the Department. [32]

17. COMMENT: The definition of a "Hydraulically connected system" should be clarified to avoid any confusion. For example, one hydraulically connected system may have more than one STP, and one STP may serve more than one hydraulically connected system. The language in the permit should be clarified to reflect this particular situation as follows: "For the CCMUA, Camden City and Gloucester City, hydraulically connected system means the entire collection system that conveys flow to the CCMUA's STP." [5] [11] [24]

RESPONSE 15-17: Part IV.B.1.c contains the following definition for hydraulically connected system:

> "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."

The hydraulically connected system can include multiple drainage areas, with multiple CSOs to the same or different receiving streams. All parts of a collection system that convey flow during dry weather to a single STP are part of a hydraulically connected system regardless of which waterway the CSO may discharge into. Pursuant to this definition above, the permittee may choose to divide such a system into smaller segmented hydraulically connected systems; however, such a determination must be made in consultation with the Department.

Additionally, if the hydraulically connected system is being segmented into smaller systems, the permittee may choose to pursue either the Presumption Approach or Demonstration Approach for each of the smaller segmented systems. Under the Presumption Approach, the limit of four overflows per year can apply to each individual subsystem. Please refer to **RESPONSE 109-118** regarding the Presumption Approach and **RESPONSE 138-139** regarding the Demonstration Approach where both are in Section D of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of these comments.

18. COMMENT: Part IV Section D. Nine Elements of the Long Term Control Plan - D.5, it is suggested that the Department change "Consideration" to "Considerations" to conform to the National CSO Policy. [6]

RESPONSE 18: The Department agrees that "Cost/Performance Considerations" is more appropriate than "Cost/Performance Consideration." This typographical error was rectified.

This change affects Part IV.D.5 of the Notes and Definitions section for the Final permits for CCMUA (NJ0026182), the City of Camden (NJ0108812) and the City of Gloucester (NJ0108847).

Part IV Combined Sewer Management, Part A, Monitoring Requirements

19. COMMENT: PVSC requests that Part IV Section A.1 be deleted from its Individual NJPDES Permit since PVSC does not own or operate any CSO outfalls. [42]

20. COMMENT: The BCUA does not own nor operate any CSO Outfalls, and accordingly, Part IV Section A.1should be noted as being not applicable to the BCUA. [21]

21. COMMENT: Delete Part IV Sections A.1.a, b, and c. and substitute with "Since the permittee does not own/operate any CSO outfalls, there are no CSO Monitoring requirements at this time." [15]

22. COMMENT: Part IV Section A.1.c does not apply to JMEUC since they have no CSO discharges. [9]

RESPONSE 19-22: The Department agrees that Part IV.A.1 was erroneously included in these four NJPDES CSO Draft permits; namely JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028), MCUA (NJ0020141) and PVSC (NJ0021016). Part IV.A.1 "CSO Monitoring Requirements", was included in all NJPDES CSO permits including those STP permittees that do not currently own/operate any CSO outfalls. It is clear that this was an administrative error since there are no CSO monitoring requirements or CSO Monitoring Report Forms (MRFs) for these four permittees in Part III. The Department has deleted this section and replaced it with revised language in these four NJPDES CSO permits. Conditions a though c found in these Draft permits have been deleted from Part IV.A.1, and are replaced with the following new condition:

"a. Since the permittee does not own/operate any CSO outfalls, there are no CSO monitoring requirements at this time."

This change affects the Final permits for JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028), MCUA (NJ0020141) and PVSC (NJ0021016) only. No changes have been made to any of the other Final permits as a result of these comments.

23. COMMENT: The JMEUC collection system is separate up to a point approximately 1100 feet upstream of the STP where the Elizabeth City CSS ties in via force main connection. Part IV.A.1.a should be revised to reflect that these provisions only relate to this short section of sewer. Please add the following text for clarification:

"JMEUC owns and operates a STP that receives combined sewage from Elizabeth City. JMEUC also owns and operates 1100 feet of combined sewer upstream of the STP that conveys Elizabeth City's combined wastewater to the STP. JMEUC does not own or operate CSO outfalls and as such the permit conditions are limited to the facilities previously identified. JMEUC's responsibilities under this permit for development of an approvable CSO LTCP are limited to assisting Elizabeth City with the evaluation of those alternatives that would impact JMEUC owned and operated facilities." [9]

RESPONSE 23: While the Department appreciates and acknowledges this technical information for the purposes of the administrative record, the Department does not agree that it is necessary to incorporate this detailed information into Part IV.A.1. Additionally, as described in **RESPONSE 19-22** of Section B of the Response to Comments document, JMEUC does not own/operate any CSO outfalls; therefore, the conditions of Part IV.A.1 have been modified in the Final permit for JMEUC. Also, see **RESPONSE 26-42** of Section A of the Response to Comments document regarding the permittees' obligations in the development of the LTCP.

No additional changes have been made to the Final permit(s) as a result of this comment.

24. COMMENT: In accordance with Part IV.A.1.c., "Discharges shall be directly monitored or predicted using a DEP approved …model." Currently, there are no overflow monitoring meters in place. Also, there is currently no methodology or plan in place to collect rainfall data and run a model to produce monthly overflow volumes. The current model uses rainfall data as an

input, but assumes an operational methodology to determine overflows. The model would need the actual operational data inputs as well as rainfall data. The rainfall monitoring stations needed for an accurate modeling of the sewer system are also not in place.

The length of time needed to prepare all the model inputs, run the model, and check the output to determine whether there were any problems takes many months. Therefore, PVSC recommends that the computer derived overflow information be reported annually 6 months following the conclusion of the modeling year. PVSC recommends that the CSO discharge reporting commence no later than EDP+30 months. [42] [44]

25. COMMENT: Regarding Part IV.A.1.c, please clarify if such a model has been approved, and if not, then a schedule of compliance needs to be developed for this issue. [25] [32]

26. COMMENT: Currently, there are no overflow monitoring meters in place. Also, there is no methodology or plan in place to collect rainfall data and run a model to produce monthly overflow volumes using a model, nor does it seem likely a model can be run within the allotted time of 25 days shown in Part III of the permit. We recommend that the CSO discharge reporting commence no earlier than EDP +12 months. [29] [40]

27. COMMENT: Regarding Part IV.A.1.c, are there specific model platforms the Department is looking for? What are the criteria for approval? What constitutes up-to-date? [28] [31]

28. COMMENT: Regarding Part IV.A.1.c, may the permittee assume that the existing models required under the general permit have been approved by the Department? [6] [15] [20] [35] [42] [44]

RESPONSE 24-28: Modeling of CSS responses to precipitation events was a requirement of the 1995 MGP which was renewed by the Department in 2004. As described in the Fact Sheet:

> "The first MGP was issued on January 27, 1995, and became effective on March 1, 1995. Under the 1995 MGP, permittees which own and/or operated any portion of a CSS were required to develop and implement technology based control measures including the NMCs. …. In addition, the permittees were required to initiate the first element of the LTCP, by requiring the development of Combined Sewer System Characterization Studies (System Characterization Study) to demonstrate the relationship between rainfall, runoff and sewer system responses. As part of the studies, permittees were required to develop a field calibrated and verified CSO model designed to represent the CSS's response to historical events of precipitation. The study was divided into six components: 1. Monitoring Program Proposal and Work Plan; 2. Service Area and Land Use Report; 3. Sewer System Inventory and Assessment Report; 4. Rainfall Monitoring Study; 5. Combined Sewer Overflow Monitoring Study; and 6. Combined Sewer System Modeling Study."

Despite the fact that modeling was a component of previous NJPDES CSO permits, the Department recognizes that permit conditions as included in these individual NJPDES CSO permit may impact any such models to measure CSO events. Models submitted under the 2004 MGP may be utilized for this purpose. The Department also recognizes that additional time

may be necessary to allow permittees to install flow meters if necessary. For these reasons, the Department is delaying MRF reporting for "Duration of Discharge" only until EDP +6 months as described in the CSO Submittal Summary as well as described in **RESPONSE 55-62** of Section D of the Response to Comments document. However, please note that MRF submission requirements for S/F recording and Precipitation monitoring still remain at EDP.

While Part IV.A.1.c describes "CSO Monitoring Requirements," this change has been incorporated in Part III of the Final permits.

With respect to the criteria or "platform" for any model, the Department is not seeking a specific model platform. Rather, consistent with the provisions of Part IV.G.1.b.iv, the model must be EPA or Department approved. Such model must then be properly calibrated and verified with field measurements in accordance with a Department approved work plan. EPA guidance is available for CSS flow monitoring in Chapter 5 of their guidance document entitled "Combined Sewer Overflows Guidance for Monitoring and Modeling" available at http://water.epa.gov/polwaste/npdes/cso/Guidance-Documents.cfm.

This change affects Part III where the MRF for "Duration of Discharge" is not required to be submitted until EDP +6 months.

29. COMMENT: Part IV.A.1.c refers to ". . . using a NJDEP approved up-to-date model" but Part IV.G.1.b.iv describes the requirements of the models to be used in this permit. Therefore, delete "up-to-date" and add after "model", "as required by Part IV.G.1.a.iv." [15] [20] [35] [42] [44]

RESPONSE 29: The Department does not agree that the changes requested are necessary including a reference to Part IV.G.1.a.iv. Part IV.G.1 refers to Characterization, Monitoring and Modeling of the CSS where modeling of the sewer system is one requirement. While the Department agrees that the model utilized for predicting discharges from CSO outfalls based on precipitation events pursuant to Part IV.A.1.c could be the same model as referred to in Part IV.G.1, so a cross reference is not necessary.

No changes have been made to the Final permit(s) as a result of this comment.

30. COMMENT: In Part IV Section A.1.c add "CSO" before "Discharges." [20] [35] [40] [44]

RESPONSE 30: The Department thanks the commenter for this suggestion; however, this suggested change is not necessary since the heading of the section is "CSO Monitoring Requirements" which qualifies the type of discharges referenced in this section of the permit. Also, Part III monitoring requirements that are referred to in Part IV.A.1 are specific to the CSO outfalls.

No changes have been made to the Final permit(s) as a result of this comment.

Part IV Combined Sewer Management, Part B, Recordkeeping

31. COMMENT: Delete Part IV B.1.b and replace with "Since the permittee does not own/operate any CSO outfalls, there are no CSO monitoring requirements at this time." [15]

32. COMMENT: PVSC requests that Part IV.B.1.b and c be deleted from its Individual NJPDES Permit (NJ0021016) since PVSC does not own or operate any CSO outfalls. [42]

33. COMMENT: Part IV.B.1.a and b should be deleted as JMEUC does not own or operate any CSO outfalls. Part IV.B.1.c requires JMEUC to retain "records to document implementation of the NMCs and LTCP…" However, Elizabeth City has this responsibility as owner of the CSO outfalls. [9]

34. COMMENT: Because BCUA does not own nor operate any CSO outfalls or S/F control facilities, Part IV.B.1.b.(4) should be eliminated from the permit, or noted as not applicable to the BCUA. [21]

RESPONSE 31-34: The Department agrees that JMEUC, BCUA, MCUA and PVSC do not currently own/operate any CSO outfalls. The Department has revisited this condition for these permits and has determined that Part IV.B.1.a has been revised to refer only to those portions of the CSS that the permittee owns/operates. Part IV.B.1.b and Part IV.B.1.c (as included in the draft permits) have been removed from the above referenced four STP permits that do not currently own/operate any CSO outfalls.

This change affects the Final permits for JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028), MCUA (NJ0020141) and PVSC (NJ0021016) only. No changes have been made to any of the other Final permits as a result of these comments.

35. COMMENT: Part IV.B.1.a. addresses the types of CSS documentation that the permittee must identify, prepare, and maintain. When does NHSA have to comply with these requirements and have the documentation ready for submission to the Department? [25]

36. COMMENT: Please identify the timeframe allotted to complete the requirements at Part IV.B.1.a. [25]

37. COMMENT: Part IV.B.1 includes requirements that pertain to maintaining documentation as to who did the analysis and the date the analysis was completed. If the work is contracted to an independent commercial lab, there will be no assurance that the lab will provide this information. Is this reference just for analytical work completed in-house? This should be removed from the permit. [12] [35]

RESPONSE 35-37: For those STPs that do own/operate a CSO outfall, such as NHSA, these recordkeeping requirements are appropriate and are retained in the final permit. This information shall be made available to the Department upon request. This condition becomes effective on EDP. The analytical information required under Part IV.B.1.b and c should be provided from the laboratory reports, chain of custody forms, etc.

While there have been formatting changes to Part IV.B.1.b and c as compared to the draft permits, no changes to wording or content have been made to the Final permit(s) as a result of these comments.

Part IV Combined Sewer Management, Part C, Reporting

38. COMMENT: PVSC requests that this entire section be deleted from its Individual NJPDES Permit since PVSC does not own or operate any CSO outfalls. [42]

RESPONSE 38: The permittee is correct in that Part IV.C.1 as written should not have been included in the NJPDES CSO Draft permit for PVSC (NJ0021016). The other NJPDES CSO Draft permits issued to STPs who do not own/operate CSO outfalls (i.e., JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028), MCUA (NJ0020141)) contained a different version of Part IV.C.1 that was tailored to reflect that the STP does not own/operate any CSO outfalls. It is clear that this was an administrative error since there are no CSO monitoring requirements or CSO MRFs in Part III of PVSCs Draft permit. Part IV.C.1 conditions a though j, as found in PVSC's Draft permit, have been deleted as requested and a new condition C.1.a has been added as follows:

a. Since the permittee does not own/operate any CSO outfalls, there are no CSO monitoring report requirements at this time.

This ensures consistency with language as included in other STP permits that do not own/operate CSO outfalls.

This change affects Part IV.C.1 of the Final permit for PVSC (NJ0021016). No changes have been made to any of the other Final permits as a result of these comments.

39. COMMENT: Part IV.C.1.a acknowledges that "Since the permittee does not own/operate any CSO outfalls, there are no CSO monitoring report requirements at this time." This conclusion, which reflects the legal status of the CSO outfalls and who controls the information with regard to their operation, should be reflected in all of the other CSO-related sections and serve to eliminate or reduce reporting responsibilities throughout the subsequent sections. [9]

RESPONSE 39: As described in **RESPONSE 38** and **RESPONSE 256** of Section B of the Response to Comments document, the final NJPDES CSO permits for BCUA (NJ0020028), MCUA (NJ0020141), PVSC (NJ0021016) and JMEUC (NJ0024741) contain consistent requirements for Part IV.A.1, C.1 and E.1 to reflect that these STPs do not own/operate CSO outfalls. Please refer to **RESPONSE 26-42** of Section A of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

40. COMMENT: Part IV.C.1.b requires NHSA to submit a summary of the information for the "total quantity of Solids/Floatables removed from ALL outfalls on the MRF for the first CSO

outfall only" and only when such waste is measured for disposal." NHSA currently removes and disposes of the S/F debris in 20 yard dumpsters. The volume is known based on the volume of the dumpster, however the weight is estimated. NHSA does not have the equipment to weigh the debris removed and it is not apparent why this would be necessary. Thus, the "weight" requirement should be deleted. [25]

RESPONSE 40: The Department agrees with the commenter that it is not necessary to measure both volume and weight. The Department has determined that volume is the preferred form of measurement on a State wide basis as described in **RESPONSE 144** of Section A of the Response to Comments document. Measurement of S/F and any associated trends over time is a tangible way to document progress in improving CSO discharge quality.

This change affects Part III of the Final permits where monitoring is only required as volume.

41. COMMENT: Regarding Part IV.C.1.c, is a gauge at Newark Airport adequate or does it need to be a local gauge owned and operated by the City of Elizabeth? Is the City of Elizabeth limited to one rain gauge if it feels that the area is better served by additional rain gauges? And if additional rain gauges are utilized, how will the information be evaluated relative to the individual CSOs and drainage areas?

Since the drainage area of the Elizabeth River covers a large area located upstream, how will rainfall in this area be measured and how will the impact upon flows and water quality in the Elizabeth River be identified? This same comment applies to the Peripheral Ditch and Great Ditch. [12]

42. COMMENT: Regarding Part IV.C.1.c, please clarify what is meant by "…rain gauge representative of the area …"? [12] [35]

RESPONSE 41-42: The permittee shall choose a location that is most representative of precipitation in the area of the CSS. Please refer to **RESPONSE 136** in Section A of the Response to Comments document.

Rainfall data from existing weather stations (often maintained at airports) may be acceptable so long as it is representative of the CSS area. The Department does not intend for this condition to mean that the permittee must own and operate a rain gauge. The permittee can also choose to utilize one rain gauge or multiple rain gauges depending on the specifics of their location. If multiple rain gauges will be used, the permittee must notify the Department so that a minor modification can be performed to incorporate an additional row on the MRF. Additional guidance regarding the measurement of rainfall data is available in Chapter 5 of the "Combined Sewer Overflows Guidance for Monitoring and Modeling" available at http://water.epa.gov/polwaste/npdes/cso/upload/chap05-cso.pdf.

No changes have been made to the Final permit(s) as a result of these comments.

43. COMMENT: Regarding Part IV.C.1.d, if the reporting of duration of discharge is based on a model, as allowed according to Section A.1.c, the reported discharge would be based only on the output of a model calibrated to certain conditions in the sewer system. Such predictions can only approximate the reaction of the CSS to a weather event. In this circumstance, the permittee can only certify that a model of the CSS was run, and that it predicted a certain number of discharge days that was reported on the MRF. The MRF should therefore be notated to indicate that the discharge report was a prediction of the model, and not directly monitored. [33] [34]

44. COMMENT: If the "Discharges" are "predicted using a DEP …model" the predictions are only the output of a model calibrated to certain conditions in the sewer system. Similar to a model predicting the weather, the predictions can only approximate the reaction of the CSS to a weather event. There should be a notation on the MRF that the discharge report was a prediction of the model, and not directly monitored. Therefore, the permittee can only certify that a model of the CSS was run, and it predicted the results that were reported on the MRF. On the MRF under the column labeled "Sample Type" the boxes below should be labeled "Measured" or "Modeled" as applicable. [20] [35]

45. COMMENT: If the "Discharges are" predicted "using a DEP …model" the predictions are only the output of a model calibrated to certain conditions in the sewer system. Similar to a model predicting the weather, the predictions can only approximate the reaction of the CSS to a weather event. There should be a notation on the MRF that the discharge report was a prediction of the model, and not directly monitored. Therefore, the permittee can only certify that a model of the CSS was run, and it predicted a certain result that was reported on the MRF. [29] [40] [42] [44]

46. COMMENT: Part IV.C 1.d states that the duration of a discharge shall be reported on the MRF, and Part IV.A.1.c states that discharges shall be directly monitored or predicted using a DEP approved up-to-date model. Will the MRF include categories to indicate if the data provided is from direct monitoring or model prediction? [28] [31]

RESPONSE 43-46: With the exception of Trenton SA (NJ0020923), "Duration of Discharge" data shall be reported on the MRF for CSO outfalls. This is also discussed in **RESPONSE 137-143** of Section A of the Response to Comments document where a summary of the required information is as follows:

Parameter	Sample Point	Limit	Units	Frequency	Sample Type
Duration of Discharge	Effluent Gross Value	Report Only	# of days	1/Month	~~Measured~~ Estimated

This change affects Part III of the Final permits.

47. COMMENT: Regarding Part IV.C.1.d, there are currently no overflow monitoring meters in place and there is no methodology or plan in place to collect rainfall data to run a model to produce monthly overflow volumes as allowable under Part IV.A.1.c. The current model uses rainfall data as an input, but assumes an operational methodology to determine overflows. The

model would need the actual operational data inputs as well as rainfall data. The rainfall monitoring stations needed for an accurate modeling of the sewer system are also not in place. The length of time needed to prepare all the model inputs, run the model, and check the output to determine whether there were any problems takes many months. Therefore, the permittee recommends that the computer derived overflow information be reported annually 6 months following the conclusion of the modeling year. The permittee recommends that the CSO discharge reporting commence no later than EDP +30 months. [35] [42]

48. COMMENT: CSO discharge reporting should commence no later than EDP +30 months. This allows for 12 months to set up the rainfall monitoring network and computer and reporting methodology, 12 months for the first year of monitoring, and six months to compile and QC the operational and rainfall data, run the models, and prepare a report. Therefore, insert "except for the requirements of C.1.d which shall start at EDP +30 months" after "permit action." [35] [44]

49. COMMENT: Currently, we have no overflow monitoring meters in place. Also, there is no methodology or plan in place to collect rainfall data and run a model to produce monthly overflow volumes using a model, nor is it known whether a model can be run within the allotted time of 25 days shown in Part III of the permit. We recommend that the CSO discharge reporting commence no later than EDP +12 months. [20]

50. COMMENT: To be able to report the duration of a CSO discharge as required in Part IV.C.1.d, meters would need to be installed at each outfall. This is inappropriate and excessive given the lack of water quality impacts. If this requirement is included, significant time must be provided to comply. [25]

51. COMMENT: The Department should provide an explanation regarding the reason for requiring the collection of the CSO Reporting Data. Specifically, how does requiring this information relate to measuring compliance with any of the NMCs or the LTCP requirements? [32]

52. COMMENT: How do the requirements in Part IV.C.1.d relate to measuring compliance with any of the NMCs or the requirements of an LTCP? Any model-predicted discharge occurs for any day or minimal part thereof, and that will be considered as one overflow event in determining compliance with the Presumptive Approach. Similarly, any model-predicted discharge will be deemed as an overflow event for the entire hydraulically connected system in determining compliance with the Presumptive Approach. Unless the outfalls are carefully selected, or modifications to the boundaries of a hydraulically connected system can be modified, excessive violations may occur. If there is no clear purpose to the collection of this data, please omit Part IV.C.1.c and d in their entirety from this permit. [20] [35]

53. COMMENT: How does the information required relate to measuring compliance with any of the NMCs or the requirements of an LTCP? If there is no clear purpose to the collection of this data, please omit Part IV.C.1.c and d in their entirety from the permit. [40] [42] [44]

RESPONSE 47-53: Part IV.C.1 establishes conditions as they relate to the measurement of precipitation for monthly reporting on the MRF. This is described in **RESPONSE 137-143** of

Section A of the Response to Comments document. The permittee is required to report "Duration of Discharge" as the number of days. It is important to note that "Duration of Discharge" is not a measure of an "event" under the LTCP and should not be confused as such. Please refer to **RESPONSE 24-28** of Section B of the Response to Comments document for additional information on the use of overflow meters. Note that flow meters are not required.

This is a separate permit condition from the Characterization, Monitoring and Modeling of the CSS requirement as included in Part IV.G.1 which requires rainfall data to calibrate appropriate water quality models to predict CSO discharges. Please note that this requirement is not measuring events as defined under the LTCP - Evaluation of Alternatives (Part IV.G.4).

The Department is requiring this information in Part IV.C.1 in part to be able to provide this information to the public as well as for CSO monitoring as required at Part IV.F.9. Note that the utilization of a rain gauge for MRF reporting requirements is immediately available to permittees.

No changes have been made to the Final permit(s) as a result of these comments.

54. COMMENT: Part IV.C.1.g requires that the MRFs be certified by the highest ranking official with day-to-day managerial and operational responsibilities. It is unclear if the Department is suggesting use of the same certification provided under Part IV.D.1.b.i. In addition, it will not be possible to certify to the accuracy of the duration of a discharge where that discharge was predicted using a Department approved model as opposed to being monitored or measured. [35]

RESPONSE 54: Part IV.C.1.g within CSM Part IV refers specifically to certification of MRFs for CSO discharges. In instances where the permittee is an STP that owns/operates CSOs, the same requirement for certification of MRFs applies to both the MRFs associated with the STP discharge as well as the MRFs associated with the CSO discharges. However, there is a separate certification process for CSO reports as specified in Part IV.D.1.b.i. Part IV.D.1.b.i is stated as follows:

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.

   i. "I certify under penalty of law that this document and all attachments 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, 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."

The certification provided under Part IV.D.1.b.i stated above is not applicable to MRFs. Rather, Part IV.C.1.g is applicable to certification of MRFs,

With respect to certification of "Duration of Discharge" values that are based on a model, the Department has determined that use of a Department approved model is acceptable for the purposes of modeling CSO discharges. Please refer to **RESPONSE 137-143** of Section A of this Response to Comments document for additional information on monitoring and reporting "Duration of Discharge."

No changes have been made to the Final permit(s) as a result of this comment.

Part IV Combined Sewer Management, Part D, Submittals

General Comments

55. COMMENT: A period of time should be included in the permit for the permittees to engage engineering consultants experienced in almost every area of the environmental engineering profession. The regulations governing many public bodies, including those whose spending must be approved by the Department of Community Affairs (DCA), which requires the hiring of professionals through a Request for Proposal/Request for Qualifications process in accordance with State procurement regulations. Any cooperative work agreements among the permittees, as suggested in the permit, will require forming a Cooperative Purchasing Group to share the costs of undertaking and satisfying many of the permit requirements and the preparation of a single LTCP. These actions will take significant time to put into place and is not adequately provided for in the Draft permit. Adequate time should therefore be added at the beginning of the LTCP process to form the group and hire the professionals needed to produce the LTCP. [6] [15] [20] [28] [29] [31] [33] [34] [35] [40] [42] [44]

56. COMMENT: Municipalities must budget many millions of dollars for the comprehensive plans outlined in the permit. Funds for this work must be included in the budget, which is only prepared once per year, and must be introduced, adopted and approved by the DCA, Division of Local Government Services. This complex and time consuming funding process must be worked into the permit's schedule. [6] [20] [25] [28] [31] [35]

57. COMMENT: In order to meet the goals of public participation and developing a single LTCP, sufficient time has not been allotted for many of the tasks that will have to be undertaken by many independent government entities. Specifically, the entities must budget many millions of dollars for comprehensive plans outlined in the permit. Funds for this work will come out of local budgets which are only prepared once per year, and must be approved by the State. Some municipalities' spending is actually controlled by the State, which must approve all expenditures. This must be worked into the permit's schedule. [6] [15] [20] [35] [42] [44]

58. COMMENT: The time allotted for many of the tasks required by the permit are too short to meet the goals of public participation and a single LTCP for multiple independent government entities. Based upon our April 2007 "Cost and Performance Analysis Report", the lowest cost

alternatives range between $400,000,000 to over $1,000,000,000. In consideration of the magnitude of these costs, the Department must give us adequate planning time to evaluate a sufficient number of alternatives to reduce these costs. Specifically, more time is necessary to complete upgrades to outdated CSS models and for the development and implementation of an ambient sampling and pilot testing program to allow permittees to fully explore the merits of the "Demonstration" approach. [30]

59. COMMENT: The proposed NMCs and LTCP provisions to address CSO and collection system operations and improvements are multi-jurisdictional activities that will need to be implemented. A reasonable schedule needs to be identified, particularly where the revised permit language is imposing new activities related to the NMCs compliance. For those tasks and submission requirements relating to specific compliance for responsibilities under Part IV where NHSA does not have lead responsibility, the performance expectations need to be further clarified by the Department. [48]

60. COMMENT: We have requested additional time for submitting parts of the permits. The additional time that we have requested is reasonable due to the age, complexity of the City sewer system, the need to conduct additional sampling in the system and receiving waters, and the need to obtain pertinent information from hydraulically connected municipalities and agencies. However, some of the needed information may not be readily available or some participants may not willingly provide information. Therefore, the City is reserving the right to request reasonable extensions to some of the submittal dates. [12]

61. COMMENT: The central questions that will determine whether these permits are sufficient and effective are whether the LTCPs will be expeditiously developed, whether they will be adequate to the task and whether the Department will actually approve them. [3]

62. COMMENT: The Department has missed timelines in the past and it is unclear how to best build into a permit that the Department will actually act on an approvable permit LTCP within a specific time period. The fear is that in three years, the Department will simply not adopt it. There were issues in 2009 with the previous permit where there was a new permit public noticed, but never adopted, where now we are coming up with new permits. [1]

RESPONSE 55-62: The Department is issuing these final permits in March 2015 with an EDP of July 1, 2015 to accommodate planning and budgeting for the upcoming fiscal year. The Department acknowledges the need to have municipal and other government entities' budgets in place by July 1.

The Department has agreed to adjust some of the various due dates identified in Part IV of the Final permits. The Department recognizes that development of the LTCP is a complex task and that many of the permittees have already committed to work with their member communities to generate a single, coordinated LTCP. The Department also recognizes the added up front administrative complexity of developing and subsequently submitting a single LTCP. To that end, for those hydraulically connected permittees who have certified that they will work together to submit a single, coordinated LTCP, the Department has extended the compliance schedule in their permit for final LTCP submission to EDP +59 months. For those permittees developing

separate LTCPs, submission of the final LTCP is due by EDP +3 years. Please refer to the CSO Submittal Summary as included in all Final permits for a detailed listing of due dates.

Note that any group of hydraulically connected permittees who will be working cooperatively to develop a single LTCP, but have not yet submitted certification to the Department that they will do so, may still submit the certification and a request for an extension of the due dates in the permit. Any such modification requests will be processed in accordance with N.J.A.C. 7:14A-16 et seq. and, depending on when the certification is submitted to the Department, may not be effective prior to the first due date. As such, these permittees are encouraged to submit the certification as soon as possible but before EDP+3 months. The Department is confident that completion of a single LTCP for hydraulically connected permittees will result in a more cost efficient process.

The Department understands that several of the submittals required under this permit will be extensive and that response times by both the Department and permittees must be short in order to adhere to the final due date for the LTCP. The NJPDES CSO program is a priority for the Department and the Department is committed to review all submissions including work plans in a timely fashion given the fact that other requirements cascade from work plan submissions. The Department also plans to work closely with the permittees through the development of the LTCP and hopes that this close relationship will avert unforeseen delays.

In the event that there are unforeseen delays, including but not limited to delays by the Department, permittees can request a permit modification to extend the compliance schedule. Request for an extension of due dates in the permit may be submitted to the Department consistent with the procedures at N.J.A.C. 7:14A-16 et seq. The Department requests that such applications be submitted three to six months in advance of the due date so that the Department is able to evaluate the request and issue a modification to the permit if appropriate. The request must include a detailed justification as to why the time extension is warranted and is necessary to achieve compliance with the final due dates in the permit.

Please note that many of the requirements in these NJPDES CSO permits are not completely new. For example, the NMCs have been required as permit conditions since 1995, although there are certain clarifications and enhancements as included in these NJPDES CSO permits. Further, parts of the nine elements of the LTCPs were required to be submitted under the 2004 general permit. To the extent that the permittee can certify that previous submissions are still accurate and representative, they can do so under this permit.

These changes affects various permit conditions in Part IV.D (as detailed in responses below) and are summarized in the CSO Submittal Summary of the Final permits.

63. COMMENT: Issues relating to the impairment to the receiving waters for the NHSA Adams Street and NHSA River Road STPs will need to be determined in consideration of the proposed schedule for the LTCP. This will need to consider the amount of flow that comes from the upstream drainage basin and STPs through their CSOs, the actual impacts to the receiving waters, and the costs of implementing these CSO controls. The NHSA Adams Street and NHSA River Road STPs have a very small impact on the Hudson River in the lower New York

Harbor; to a lesser degree than PVSC or the upper drainage areas. How will the Department look at the actual impacts and the extreme costs of implementing the CSO controls to the service area as a whole? [48]

RESPONSE 63: The Department agrees that issues relating to impairment of the receiving waters and impacts from CSOs on the receiving waters must be considered in development of the LTCP. Regardless of the attainment of water quality standards and any impairments, permittees are required to comply with the more stringent of water quality-based or technology-based requirements. The permittee must complete a Cost/Performance Analysis as part of LTCP #5 to determine what level of technology to control CSO discharges may be reasonably implemented. 59 Fed. Reg. at 18693. Please refer to **RESPONSE 70** in Section A of the Response to Comments document for additional information. Please refer to **RESPONSE 170-174** of Section B of the Response to Comments document where the Department has allotted additional time for LTCP submission for permittees who have committed to a single, coordinated LTCP.

Relative impacts from the permittee versus other sources are required to be evaluated under Part IV.G.1, namely "Characterization Monitoring and Modeling of the Combined Sewer System." However, issues relating to receiving water body impairment and the resulting effect on the LTCP development are more appropriately addressed in specific components of the LTCP such as Part IV.G.1, "Characterization Monitoring and Modeling of the Combined Sewer System", Part IV.G.4, "Evaluation of Alternatives", Part IV.G.9 "Compliance Monitoring Program."

No changes have been made to the Final permit(s) as a result of this comment.

Specific Comments

64. COMMENT: Section D.1.a requires the permittee to "correct all deficiencies cited by the Department and submit a revised approvable document within 30 days…" This section has eliminated due process by precluding any disagreement with a conclusion by the Department. Moreover, it is not apparent that a report deficiency, even if correct, can be remedied within 30 days. This section should only require that a response to issues raised be submitted within a particular period of time. [9] [25]

65. COMMENT: PVSC requests that Part IV.D.1.a be revised to state that "The permittee shall provide a response document addressing deficiencies cited by the Department within 30 days of notification." The wording of this section eliminates PVSC's ability to appeal an alleged "deficiency;" it also assumes that a reported deficiency can be remedied within 30 days. [42]

66. COMMENT: The reports required under this permit are large and complex, some of which are expected to be over 1000 pages in length with many appendices. A review of CSO/SSO EPA Consent Decrees (Cincinnati, Akron, Chattanooga, DCW ASA, Evansville, Louisville and Jefferson Counties, Metro St. Louis, Miami-Dade, Chicago, Scranton) shows a range of time periods allowed for resubmittal between 30 days for small permittees to 120 days for large permittees. Of the group of large permittees, 67% had allowable resubmittal periods of 60 days or greater, while the remainder of large permittees were allowed 45 days. Therefore, delete

"30", and replace it with "60" days, or such other time as the parties agree to in writing." [15] [20] [29] [35] [40] [42] [44]

67. COMMENT: Part IV.D.1.a should be modified to state that once the initial response is submitted, the permittee shall then submit a revised document within 120 days, or such other time as the parties agree to in writing, from the notification by the Department that its initial response to deficiencies has adequately addressed the Department's concerns. [35] [42] [44]

68. COMMENT: Part IV.D.1.a requires a 30 day resubmission of submittals that the Department considers to be deficient. The submittals required under this permit are large and may be dependent on information from other communities. Please consider extending the resubmission period from 30 days to 60 days. [28] [31]

69. COMMENT: We request that 30 days in Part IV.D.1.a be increased to 60 days. The anticipated submittals will be several hundred pages long and complex, so more time will be required to address the comments from the Department. The 30 day turnaround time is not enough time to address the comments and prepare a revised document. [30]

70. COMMENT: Given the size and complexity of many of the CSO submittals, 30 days is not enough time to address deficiencies that might be cited by the Department. Please revise to allow "60 days or such other time as the parties agree to in writing." Also, the timely completion of an LTCP requires that the Department review and comment on CSO submittals in a timely and predictable manner. Therefore, please add the statement: "The Department shall review and comment on all CSO submittals within 30 days of receipt." [33] [34]

RESPONSE 64-70: The Department has carefully considered these comments and has determined that it is appropriate to modify Part IV.D.1.a as follows:

> "a. The permittee shall respond to ~~correct~~ 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."

As described previously, the Department recognizes that several of the submittals required under this permit will be extensive and that response times by both the Department and permittees must be short in order to adhere to the final due date for the LTCP. Please refer to **RESPONSE 55-62** of Section B of the Response to Comments document for additional information.

This change affects Part IV.D.1.a of the Final permits.

71. COMMENT: Regarding Part IV.D.1.b, where the permit may require submission of previously prepared reports, it may not be possible to certify to the truth, accuracy, and completeness of those reports depending on when they were prepared and by whom. [35]

RESPONSE 71: Part IV.D.1.b requires that all reports be submitted to the Department, and that they be certified to be true, accurate, and complete, to the best of the signors knowledge.

Any report, section of a report or information from a report that cannot be certified to meet these criteria should not be submitted to the Department.

No changes have been made to the Final permit(s) as a result of this comment.

72. COMMENT: Regarding Part IV.D.1.c, if any of the permittees are either unable or refuses to produce materials which this permittee requires for a complete submittal, will the Department take action to force the other permittee to comply with their part of the permit? Will the permittee that depends upon materials from another permittee be penalized if the other permittee cannot provide the materials? If excess I/I reduction is required from separately sewered municipalities without a discharge permit, how will the Department impose those requirements? What enforcement mechanism will be used? [6] [15] [20] [32] [35] [42] [44]

73. COMMENT: Part IV. D.1.c is vague as to the issue of responsibility. How will NBMUA know when it has satisfied the requirement to work cooperatively? NBMUA cannot be held accountable if another entity within its hydraulically connected system fails to deliver information or data, and such lack of information prevents the completion of the LTCP. In fact, at least one entity that has a direct impact on CSO discharges is not even being issued a CSO permit by the Department. NBMUA cannot be expected to gain cooperation from entities that are not themselves regulated by the Department with regard to CSO discharges. [33] [34]

74. COMMENT: Multiple adjacent municipalities (Borough of Roselle, Borough of Roselle Park, City of Linden, City of Newark, Township of Hillside, Township of Union, Union County, NJDOT, NJTPA, NJ Transit, Amtrak, Conrail, the Port Authority of New York and New Jersey, who are not CSO permittees, are hydraulically connected to the City of Elizabeth CSS. While the City of Elizabeth will work with these municipalities and identify their joint and separate responsibilities to comply with the requirements of this permit, what regulatory authority does the City of Elizabeth have to assure their compliance? Also, JMEUC and Elizabeth City will need some assistance from the Department in addressing the connections from NJDOT, railroad and other government entities, as CSO control alternatives are being developed. [12]

75. COMMENT: If any of the permittees is either unable or refuses to produce materials which this permittee is required to provide as part of a complete submittal, the Department should take action to force the other permittee to comply with their part of the permit. The permittee that depends upon materials from another permittee should not be penalized if the other permittee does not provide the materials. If excess I/I reduction is required from separately sewered municipalities without a discharge permit, the Department should impose those requirements. As such, an enforcement mechanism would have to be developed. In fact, many of the entities that have a direct impact on CSO discharges are not even being issued CSO permits by the Department. For instance, excess I/I from separately sewered municipalities, without a discharge permit, exert a direct and significant impact on CSO discharges. The City of Paterson cannot be expected to gain cooperation from entities that are not themselves regulated by the Department with regard to CSO discharges. [40]

76. COMMENT: Regarding Part IV.D.1.c, delete the word "ensure" and substitute it with the phrase "with the objective." A permittee cannot ensure the actions of other permittees/municipalities. [15] [20] [28] [31] [32] [35] [40] [42] [44]

77. COMMENT: PVSC requests that the sentence be revised to provide, "...the permittee shall endeavor to work cooperatively..." [42]

78. COMMENT: It is not possible for NBMUA to comply with this proposed requirement at Part IV.D.1.c since a permittee cannot ensure the actions of another permittee. [33] [34]

79. COMMENT: Some existing contracts between municipalities may be very old, may not have an expiration date and may not contain provisions that include or allow contract modifications to require or implement the items contained in the Draft permit. How will this be addressed? [35]

80. COMMENT: The National CSO Policy states "When different parts of a single CSS are operated by more than one authority, permits issued to each authority should generally require joint preparation and implementation of the elements of this Policy and *should specifically define the responsibilities and duties of each authority."* (Emphasis added). Therefore, delete the sentence in Part IV.D.1.c "The permittee shall identify their joint and separate responsibilities..." and replace it with "Permittee is required to coordinate system-wide implementation of the nine minimum controls and the development and implementation of the long-term CSO control plan." [20] [40] [42] [44]

81. COMMENT: As per Part IV.D.1.c, the Department appears to be allowing the permittees to identify their joint and separate responsibilities, rather than defining them within the permit in accordance with the National CSO Policy. In one sense, this is laudable, since the permittees are likely in a better position than the Department to best identify those joint and separate responsibilities. However, assigning those responsibilities will be difficult if not impossible since the interacting entities do not have enforcement power over each other. Specifying the joint and separate responsibilities in the permit would provide that each permittee, including NBMUA, knows its responsibilities. In the absence of such specification, NBMUA could be held accountable by the Department or EPA for something for which another entity is properly responsible.

We suggest that the Department work with the municipalities and authorities in the Woodcliff system to determine the optimal assignment of joint and separate responsibilities, and then re-propose permits that reflect such responsibilities. As written, the permit is too vague and indeterminate for NBMUA to properly understand its responsibilities. [33] [34]

82. COMMENT: Regarding Part IV.D.1.c, given the recognition in Part IV.C.1.a that JMEUC does not own or operate any CSO facilities, the identification of joint and separate responsibilities should be a very limited set of responsibilities (i.e., to work cooperatively with Elizabeth City). We suggest that the identification of legal responsibilities occur in advance of NJPDES permit issuance to ensure there is no confusion regarding permit compliance responsibilities. [9]

83. COMMENT: Regarding Part IV.D.1.c, PVSC requests that the Department either provide guidance on setting the responsibilities of the permittees, or revise each of the individual NJPDES Permits to identify each permittee's responsibilities. If the Department chooses to maintain this requirement, PVSC requests that the Department require permittees to memorialize this in a document that must be submitted to the Department prior to the implementation of the requirements of the Final permit. [42]

84. COMMENT: The permits issued to the POTW and its municipalities are different and allocate the responsibilities of the National CSO Policy among the two parties. Part IV.D.1.c calls for the permittees to undertake a task that has already been performed by the Department. Therefore, delete this sentence in its entirety. [15] [20] [40] [42] [44]

85. COMMENT: Does the Department have any guidelines on setting the responsibilities of the various permittees? Should these agreements be memorialized in a document and submitted to the Department? [6] [15]

RESPONSE 72-85: Part IV.D.1.c is stated, in part, as follows:

> "c. Since multiple municipalities/permittees own separate portions of the hydraulically connected sewer system, the permittees shall work cooperatively with all other appropriate municipalities/permittees in the hydraulically connected sewer system to ensure that the NMC & LTCP activities are being developed and implemented consistently. The permittee shall identify their joint and separate responsibilities with all other appropriate municipalities/permittees in the hydraulically connected sewer system regarding the implementation of the NMC and the LTCPs…"

The Department acknowledges that there is overlap for members of a hydraulically connected system with respect to the LTCP requirements that is integral to the success of the overall LTCP. The Department also acknowledges there is potential that permittees may not be able, or refuse, to produce materials necessary for a complete submittal. Further, the Department recognizes the concerns that permittees have regarding the implications of this scenario on compliance with their permit requirements. The Department aims to work cooperatively with all NJPDES CSO permittees which could include the identification of uncooperative entities.

It is the permittee's responsibility to memorialize individual responsibilities in the LTCP. These responsibilities will be carried forward in future permit requirements for each permittee as stated in **RESPONSE 26-42** of Section A of the Response to Comments document. Until LTCPs are developed, reviewed, and approved, the CSO permits cannot define responsibilities for LTCP requirements except in a generic manner. The following section has been added to Part IV, Section G of the Final permits to clarify the permittees' respective responsibilities for preparation of the LTCP:

"10. Permittee's LTCP Responsibilities

a. The permittee is responsible for submitting an LTCP that addresses all nine elements in Part IV.G.

> Where multiple permittees own/operate different portions of a hydraulically connected CSS, the permittee is required to work cooperatively with all other permittees to ensure the LTCPs are consistent. The LTCP documents must be based on the same data, characterization, models, engineering and cost studies, and other information, where appropriate. Each permittee is required to prepare the necessary information for the portion of the hydraulically connected system that the permittee owns/operates and provide this information to the other permittees within the hydraulically connected system in a timely manner for LTCP submission."

In the event a permittee does not comply with Part IV.G.10.a above in cooperating with all other hydraulically connected permittees, the Department may take appropriate enforcement action against that permittee. In the event the non-cooperation of one permittee delays or prohibits the submission of a complete LTCP for another permittee, the Department may take enforcement action against the non-cooperative permittee. Generally, the Department will determine that a permittee has worked cooperatively when it has provided all the necessary information and generated data to the other permittee(s) in a timely manner. Further STPs have documented evidence that it has used its broad authority to compel system users to provide the necessary information. For example, STPs must work with member municipalities to address I/I.

As explained further in **RESPONSE 26-42** of Section A of the Response to Comments document, STPs have broad authority within the powers granted by the Sewerage Authorities Law, N.J.S.A. 40:14A-1 et seq., the Municipal and County Utilities Authorities Law, N.J.S.A. 40:14B-1 et seq., and their respective enabling acts, and under the Water Pollution Control Act (WPCA), N.J.S.A. 58:10A-1 et seq., to act to prevent untreated discharges within their service areas and to require commitments by their member communities to develop and implement maintenance programs for their own systems as a condition of the sewer use agreements between the authority and its members. In cases of uncooperative satellite communities that do not have a CSO permit, the Department recommends the affected municipality coordinate with the receiving STP for appropriate action.

The Department acknowledges that it has not issued CSM permits for entities that may have a direct impact on CSO discharges, but do not own/operate a CSO outfall. For example, the Department has not issued CSM permits for hydraulically connected municipalities with separate sewers, some of which may have problems with their systems, such as excessive I/I, that contribute to CSO discharges. However, the permitted STPs have control over what it will accept and, therefore, under this control, can influence member municipalities with separate sewers to mitigate flows that lead to CSO discharges. These actions may include many of the CSO control strategies listed in the STPs permit, including increased storage capacity, and I/I reductions. In fact, the Department encourages STP permittees to consider hydraulically connected separate sewer municipalities as part of the solution to CSO discharges.

The Department is willing to meet with concerned permittees and representatives from other governmental agencies to work towards a mutually acceptable solution.

No changes have been made to the Final permit(s) as a result of these comments.

86. COMMENT: Regarding Part IV.D.1.c, the National CSO Policy states "When different parts of a single CSS are operated by more than one authority, permits issued to each authority should generally require joint preparation and implementation of the elements of this Policy and *should specifically define the responsibilities and duties of each authority."* (Emphasis added). The permits of both Newark and PVSC should provide that the entities are co-permittees with respect to the CSO outfalls identified. Therefore, delete the sentence "The permittee shall identify their joint and separate responsibilities…" and replace it with "Co-Permittees are required to coordinate system-wide implementation of the nine minimum controls and the development and implementation of the long-term CSO control plan." [35]

RESPONSE 86: With regard to the request for co-permittees, the Department did consider this approach for this round of individual NJPDES CSO permits but chose to proceed with separate individual permits at this time.

No changes have been made to the Final permit(s) as a result of this comment.

87. COMMENT: Define "construction-related activities" as included in Part IV.D.1.c. Does it include any construction, e.g., for repairs, or is this only about construction of new storage capacity or other new construction called for by the LTCP? [5] [11] [24]

88. COMMENT: The Department should provide a definition of "construction-related activities" and "all parties." [20] [40] [42] [44]

89. COMMENT: This section appears to be duplicative. TWAs require PVSC's approval. Therefore, PVSC receives notice from its contributing municipalities of construction activities through the TWA process. Additionally, PVSC receives monthly collections systems O&M reports from its contributing municipalities. The collection systems reports require reporting of non-routine O&M activities. PVSC requests clarification on what "construction related activities" are required under this submittal requirement, and to what "parties" notification must be made on a quarterly basis. For consistency, PVSC requests that the Department provide a standard form for permittees to utilize for reporting. [42]

90. COMMENT: Newark currently notifies, and will continue to notify, the PVSC of construction projects via the TWA process. Newark suggests that this permit section be revised to allow this continued process to satisfy this Draft permit requirement to notify PVSC on CSO construction related activities. [35]

91. COMMENT: Regarding Part IV.D.1.c, "the permittee shall make these construction related activities available publically on their website." This is the responsibility of Elizabeth City not JMEUC. JMEUC should not need to develop a website to inform the public of Elizabeth City's activities. [9]

92. COMMENT: PVSC requests that Part IV.D.1.c be revised to require that PVSC only report on its construction activities on its website, and that other individual permittees report their

construction activities on their own websites. PVSC also suggests that information required to be made available to the public should be limited to its own activities. [15] [42]

93. COMMENT: In the sentence "The permittee shall also notify the Passaic Valley…" , delete the phrase "on a quarterly basis" and substitute "30 days before the start of construction." In the same sentence, insert the phrase "and post on its website" between "Commissioners" and "of all CSO." [20] [40] [42] [44]

RESPONSE 87-93: The Department has revisited this permit condition both in content and in format where this condition is now extended into Part IV.D.1.c and Part IV.D.1.d. The second paragraph of Part IV.D.1.c requires municipalities to notify STPs of construction related activities and STPs to notify municipalities of construction-related activities. For the purposes of this requirement, "construction related activities" refers to all sewer related construction that would require a TWA within the CSS. The Department recognizes that member communities are already required to notify the STP of construction-related activities through the TWA process which is sufficient for the purposes of this section. With respect to the request for a "standard form," please note that the STP simply needs to make construction related activities available publically on their website or other acceptable means. Although not required, the permittee may choose to provide additional information to the public such as construction related to GI projects.

To clarify the intent of this requirement consistent with the above description, the Department has revised the second paragraph in Part IV.D.1.d which is stated as follows in most STP NJPDES CSO permits:

> "The permittee shall summarize on a quarterly basis its CSO construction related activities, as well as those reported to them by the other CSO permittees, in their system ~~the hydraulically connected collection system on a quarterly basis~~. 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."

This language is somewhat modified for those NJPDES CSO permits as issued to municipalities. For example, this is the language for Elizabeth City which has been modified consistent with the changes above:

> "The permittee shall also notify the Joint Meeting of Essex & Union Counties of all CSO construction related activities in their collection systems on a quarterly basis. Notification through the TWA process is sufficient for this purpose."

The purpose of this section is to promote effective communication since construction activities may impact the operation of the CSO outfalls. It is also the intention of the Department to make CSO related activities publically available in order to demonstrate to the public the activity taken to reduce or eliminate discharges from CSOs. For these reasons, this provision is required in the permit. The Department maintains that inclusion of these changes serves to satisfy the concerns raised in these comments.

This change affects the second paragraph of Part IV.D.1.c of the Final permits.

94. COMMENT: Given the anticipated file size of electronic documentation which may include reports, maps, photos, etc., it is not reasonable to impose a 20 MB file size limit. The Department should set up an ftp portal to receive all electronic submissions related to the CSO permits, or allow the permittee to make them available for download by the Department, or find another readily available technical solution to overcome this file size limitation. [33] [34]

95. COMMENT: Part IV.D.1.d requires JMEUC to make all submittals to DEP electronically with no file to exceed 20 MB. This provision should only require that submission size be comparable with the Department's system that will change over time. [9] [25]

96. COMMENT: All references to a 20 MB limit in this permit should be eliminated. The Department should acquire the commonly used technology to enable large sized file transfers. If the permittees are required to expend substantial funding to undertake this program, the Department should make this much smaller funding commitment to accept files larger than 20MB. [35]

97. COMMENT: All references to a 20 MB limit in this permit should be eliminated. The Department should acquire the commonly used technology to enable large sized file transfers. [20] [40] [42] [44]

98. COMMENT: PVSC requests that the Department allow permittees to make electronic submittals for files larger than 20 MB through a large file sharing website and/or program. PVSC uses ShareFile and has successfully submitted large files to the Department with this software. [42]

99. COMMENT: Please explain what "related" documents are referred to in Part IV.D.1.d. All submittal documents required by the Draft permit should be clearly identified to avoid submissions being deemed deficient by the Department. [28] [31]

100. COMMENT: Delete the phrase "or related to." Please explain what "related" documents were referred to in this sentence. [20] [32] [33] [34] [35] [40] [42] [44]

RESPONSE 94-100: The Department is in the process of establishing an electronic regulatory service program so that the submission of information can be accomplished electronically without the size limit of 20 MB. Once an enhanced electronic regulatory service program becomes available the Department will notify all CSO permittees. However, until such time as this service becomes available, the Department has modified this language to explain that files larger than 20 MB can be submitted in an electronic format via regular mail. The Department has also revisited the need to transmit the documents to enforcement. The modified language is as follows as compared to the Draft language as contained in most NJPDES CSO permits:

"d. The permittee shall submit all information required by ~~or related to~~ this permit via email or other electronic format acceptable to the Department to NJCSOProgram@dep.nj.gov ~~state.nj.us~~ ~~and to the permittee's enforcement inspector~~. Until the Department can accept ~~The Department cannot accept~~ any file larger than 20 megabytes (MB), ~~Any submission~~ any larger file ~~larger than that must~~ can be broken up into smaller segments ~~files less than 20 MB~~ and sent separately or can be sent via mail delivery on CDs or DVDs."

While the Department appreciates the suggestion of a share file or ftp service, the Department does not have the ability to provide these services to CSO permittees at this time.

Regarding the request for clarification of the term "related to," the Department agrees that this statement is unclear and has removed this term from the permit language as shown above.

This change affects Part IV.D.1.d of the Final permits.

101. COMMENT: All of the new and updated NMCs requirements should be deleted. NHSA's prior NJPDES permits were implemented in accordance with the Federal and State CSO requirements, including those set forth in the National CSO Policy. As there has been no change in the applicable law, or in the underlying NMCs standards, there is no basis for imposing new or "updated" requirements. Moreover, a number of these new requirements will take time to implement. The National CSO Policy (as is incorporated in the Department's regulations) provides that the NMCs must be completed as soon as possible, but no later than January 1, 1997. 59 Fed. Reg. 18,691 (April 19, 1994). As such, the Department's new approach to the NMCs would have the improper effect of putting NHSA (and other CSO communities) into immediate non-compliance. [25]

RESPONSE 101: Part IV.D.2 concerns the "Updated Nine Minimum Controls Submittal Requirements" where Part IV.F contains the specific NMCs requirements. As stated in the Fact Sheet, "Based upon the evaluation of the implementation of the NMCs, the Department has included enhancements in order to clarify requirements consist with the National CSO Policy." As permittees develop and implement the NMCs and as the public becomes more involved in the process, it became apparent that enhancements were necessary. For example, under the previous permits, a simple outfall tag would have sufficed to fulfill public notice requirements for outfall locations. In contrast, the new permit requires enhanced signage information beyond a simple tag and instead provides more information to the public regarding the nature of the CSOs. Although the previous MGP requirements satisfied the National CSO Policy regarding the NMCs, the Department determined that an update to these requirements was appropriate at this time.

No changes have been made to the Final permit(s) as a result of this comment.

102. COMMENT: Regarding Part IV.D.2.a, while the request to submit GPS latitude and longitude is not unreasonable, there are times when outfalls may be difficult to access due to circumstances beyond the control of the permittee. This could include excessive snow and ice, plus there are periods of the year when it may be difficult to get good satellite responses. Accordingly, some flexibility should be added to this requirement. The language in the permit

should be modified to read: "Unless otherwise approved by the Department the permittee shall submit GPS…" [19] [26]

103. COMMENT: Part IV.D.2.a ignores the fact that during certain times of the year, some outfalls are difficult to access (*e.g.*, due to excessive snow and ice or due to difficulty in getting satellites to respond). Accordingly, the language should be modified in accordance with the attached compliance schedule to add "on or before EDP +12 months." [25]

104. COMMENT: Part IV.D.2.a unnecessarily sets too many different deadlines. Please set the deadline for "a. GPS Coordinates" to EDP +12 months. [20] [32] [35] [40] [42] [44]

105. COMMENT: Regarding Part IV.D.2.a, procurement of services takes a minimum of 10 weeks to draft a Request for Qualifications and Proposal, advertise and contract with the chosen firm. PVSC requests that "EDP+4 months" be revised to "EDP+6 months." [42]

RESPONSE 102-105: The Department has extended the compliance schedule to 6 months from 4 months, and has added pump stations to the list of components for which GPS coordinates are required. This time extension should serve to satisfy some of the concerns identified in the comments above. Note that pump stations are already required to be identified in Part IV.F.1.f as part of the O&M requirements where Part IV.F.1.f was included in all NJPDES CSO permits.

The Department maintains that GPS latitude and longitude coordinates for all CSO regulators, pump stations and discharge outfalls owned/operated by the permittee is integral for the purposes of accurate mapping as described in the **RESPONSE 107-117** of Section B of the Response to Comments document. Part IV.D.2.a is only included in Draft permits where permittees own/operate CSO outfalls. The Department is including this condition in the Final permits with revisions as follows:

"a. The permittee shall submit GPS latitude and longitude coordinates in degrees-minutes-seconds (at a minimum to the tenth of a second accuracy) for all CSO regulators, pump stations and CSO ~~discharge~~ outfalls owned/operated by the permittee in accordance with: ~~on or before EDP + 4 months. This data shall be submitted in accordance with~~ N.J.A.C. 7:1D-Appendix A, and NJ GIS protocol at http://www.state.nj.us/dep/gis/standard.htm. The permittee shall submit this GPS data: within 6 months from the effective date of the permit (EDP)."

Regarding the concerns expressed about excessive snow or ice, and issues of access, please note that these permits become effective July 1, 2015. The PDF of the sewer map is required to be completed on or before January 1, 2016. The Department does not anticipate excessive snow or ice being a significant problem during this time frame. Additionally, the Department is not aware of periods of the year when it is difficult to get good satellite responses.

This change affects Part IV.D.2.a of the Final permits.

106. COMMENT: PVSC requests that Part IV.D.2.a be deleted from its Individual NJPDES Permit. Additionally, PVSC requests that "and discharge outfalls" be deleted from this condition. PVSC does not own or operate any CSO outfalls. [42]

RESPONSE 106: The Department recognizes that PVSC does not own/operate CSO outfalls; however, PVSC does own and operate pump stations and regulators. As a result, Part IV.D.2.a is appropriate although this permit condition is applicable to the extent that is relevant to the permittee. While Part IV.D.2.a has been modified as described in **RESPONSE 102-105** in Section B of the Response to Comments Document, the Department has not removed Part IV.D.2.a from PVSC's permit NJ0021016.

No change has been made to the Final permit for PVSC as a result of this comment.

107. COMMENT: Part IV.D.2.b contains a requirement regarding submission of a PDF of a sewer map depicting the actual locations of the separate and CSS, storm sewers, CSO regulators and outfalls owned/operated by the permittee which shall also identify flow direction and manhole invert elevations. The City of Elizabeth is requesting that the time for completion of this requirement be modified from EDP +4 months to EDP +18 months. This is necessary due to the age, complexity, and limited documentation of older portions of the sewer system; due to recent changes that have been made to the sewer system: and because hydraulically connected municipalities will need to provide requested information on their sewers, drainage areas, flows, and future plans. However, if information from hydraulically connected municipalities is not provided, the Department may need to consider additional extensions. [12]

108. COMMENT: Part IV.D.2.b should be modified to read: "The permittee shall submit a PDF of a sewer map depicting the locations of the separated and CSS, storm sewers, CSO regulators, and outfalls owned/operated by the permittee: on or before EDP +24 months." An attachment was included as part of the comments document that were submitted with a suggested compliance schedule. [25]

109. COMMENT: Comprehensive mapping does not currently exist for the CSS. Any paper sewer maps that may exist may be very old, may not contain all information required or at the "actual locations" and therefore cannot be submitted under the Certification required by Part IV.D.1. The time period for compliance should be increased due to the difficulty in assembling sewer drawings in older cities and the time it would take to survey the sewer system and prepare new mapping. Documentation on storm sewers may pose the same problems as combined and sanitary sewers. This section is useful for many purposes, but does not impact on the production of materials required in the LTCP. Therefore, delete "EDP +4 months" and replace it with "EDP+22 months or such other time as the parties agree to in writing." [20] [35] [42] [44]

110. COMMENT: Comprehensive mapping does not currently exist for the CSS for the City of Paterson. The time period for compliance should be increased due to the difficulty in assembling sewer drawings and the time it would take to survey the sewer system and prepare new mapping. Documentation on storm sewers may pose the same problems as combined and

sanitary sewers. While overall base mapping of the sewers, CSO regulators and outfalls exists, this information is not compiled into a single detailed map sufficient to provide all of the information being required, nor is all the information readily available. The vast majority of the sewer system presently in service was operational by the early 1900's. As-built records for these original installations, when available, often do not depict elevation information. Additionally, documentary records for substantial changes in the alignment, characteristics, and location of piping and structures that have occurred in the intervening years are maintained by the City of Paterson as paper records that are not easily compiled. Therefore the work needed to provide comprehensive mapping to the level of detail required will consist of compilation and verification efforts, extensive field work, and map preparation. This section is useful for many purposes, but does not impact on the production of materials required in the LTCP. Therefore, delete "EDP+4 months" and replace it with "EDP+12 months or such other time as the parties agree to in writing." [40]

111. COMMENT: Since comprehensive mapping does not currently exist for the CSS, the time period for compliance should be increased due to the difficulty in assembling sewer drawings in older cities and the time it would take to survey the sewer system and prepare new mapping. Documentation on storm sewers may pose the same problems as combined and sanitary sewers. This section is useful for many purposes, but does not impact on the production of materials required in the LTCP. Therefore, delete "EDP+4 months" and replace it with "EDP+12 months or such other time as the parties agree to in writing." [20] [32]

112. COMMENT: While Part IV.D.2.b requires the PDF of the sewer map to identify flow direction and manhole invert elevations, National CSO Policy II 2.C.1 and II 2.C.1.b do not require the level of detailed information. The information required here is extensive and will require that we engage qualified professionals and will require more than four months to complete. Some of this information may be required for collection system modeling. We request that the amount of information required be associated with the data needs for model construction which does not require invert elevation and coordinates for every manhole. We also request that the time required to produce this information be extended to EDP+18 months which is a more reasonable timeframe for the required surveys, inspections and map production. [28] [31]

113. COMMENT: Regarding Part IV.D.2.b, if existing comprehensive mapping does not currently exist, the time period for compliance should be increased due to the difficulty in assembling sewer drawings in older cities and the time it would take to survey the sewer system and prepare new mapping. Documentation on storm sewers may pose the same problems as combined and sanitary sewers. [6] [15]

114. COMMENT: It is reasonable to require that a PDF of a sewer map depicting sewers, CSO regulators, and CSO outfalls be submitted by NBMUA on or before EDP+4 months. However, the last sentence in this paragraph should be modified to read: "This map shall identify flow direction and invert elevations from surveyed portions of the system." It is not reasonable or correct to assume that all manholes have been surveyed, nor to require NBMUA to do so within EDP+4 months. [33] [34]

115. COMMENT: Regarding Part IV.D.2.b, we have mapping that illustrates the required information for the most part, but it is based on paper maps and does not include manhole invert elevations. It is also unclear as to what is meant by depicting the "actual locations." The existing system mapping is not of a scale that shows actual locations and is not based on GPS readings; however the time period allowed does not provide for development of new information. The requirement should be modified to eliminate the word "actual" and the requirement for manhole invert elevations should be deleted. [19] [25] [26]

116. COMMENT: Regarding the PDF of a sewer map, procurement of services takes a minimum of 10 weeks to draft a Request for Qualifications and Proposal, advertise and contract with the chosen firm. PVSC requests that "EDP+4 months" be revised to "EDP+6 months." [42]

117. COMMENT: Part IV.D.2.b unnecessarily sets too many different deadlines. [20] [32] [40] [42] [44]

RESPONSE 107-117: The Department recognizes that the required mapping of the sewer system will present challenges to both municipalities and STPs. This condition is included as either Part IV.D.2.a or Part IV.D.2.b, depending on the permit. The Department understands that many of the CSO permittee's sewer systems are very old and, in some cases, over 100 years old. Given this, the original maps may be lost, lack the required detail, or not be up-to-date. However, having the actual locations and the level of detail specified in the permit is critical to the proper operation and regular maintenance in day-to-day situations and under emergency conditions. By requiring actual locations, the Department wants the features of the maps to be representative of and proportional to the physical locations. Having these maps in electronic format will allow them to be forwarded to emergency managers and other authorities quickly, thus aiding any relief or damage prevention efforts. Proper mapping is necessary to ensure the success of the NJPDES CSO program.

While the Department has retained the PDF mapping requirement, several changes have been made in the Final permit. These changes include an extension of the time allotted; and a change in the components that are required to be included on the sewer map. These changes serve to simplify the permit conditions and addresses many of the concerns raised in these comments. Accordingly, Part IV has been modified as follows.

"b. The permittee shall submit a PDF of a sewer map: within 12 months from the effective date of the permit (EDP). This map shall depict~~ing~~ the actual locations of the separate and combined sanitary sewers, ~~storm sewers,~~ CSO regulators and outfalls owned/operated by the permittee.~~: on or before EDP + 4 months. This map shall identify flow direction at and manhole inverts elevations."~~

This change affects the above referenced condition which is included either as Part IV.D.2.a or Part IV.D.2.b of the Final permits.

118. COMMENT: Why is the Department requiring the CSO permittees to depict storm sewers on maps for a CSO Permit? This requirement should be in an MS4 permit. [35] [42] [44]

RESPONSE 118: As described in **RESPONSE 107-117** of Section B of the Response to Comments document, the Department has removed "storm sewers" from Part IV.D.2.b. The Department is currently in the process of renewing the NJPDES MS4 permit for Tier A Municipalities, and it is expected that mapping and inventory of some stormwater system components will be a requirement of the upcoming MS4 permit renewal.

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

119. COMMENT: Part IV.D.2 states that the permittee "shall submit a PDF of a sewer map… [with] manhole invert elevations." JMEUC's responsibility should be limited to mapping the 1100 feet of interceptor between Elizabeth City's pump station force main connection and the STP. [9]

120. COMMENT: BCUA does not own nor operate any separate, combined, or storm sewers. Accordingly, this section should be noted as not applicable to the BCUA, or the facilities to be mapped should be restricted to the interceptor sewer system and the three BCUA CSO regulators in Ridgefield Park. [21]

121. COMMENT: PVSC requests that "separate and combined sanitary sewers, storms sewers" and "and outfalls" be deleted from Part IV.D.2.b. PVSC does not own or operate the local sanitary and storm sewers, nor does it own or operate any CSO outfalls. Similarly, the Town of Harrison requests removal of "CSO regulators" from its permit. [42] [44]

122. COMMENT: The permittee does not own/operate any separate and CSS or storm sewers. Therefore, delete this section concerning a PDF of a sewer map in its entirety. [15]

RESPONSE 119-122: The Department does not agree that this section should be deleted from the permits. Part IV.D.2.b is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit conditions. If the permittee does not own/operate the collection system, they are not required to map such. Note that some of these STP permittees do own the CSO regulators.

As described in **RESPONSE 107-117** in Section B of this Response to Comments to document, the Department has extended the compliance due date for this requirement, and has revised these mapping requirements.

No additional changes have been made to Part IV.D.2.b as a result of these comments.

123. COMMENT: PVSC requests that Part IV.D.2.c be deleted from its Individual NJPDES Permit. PVSC does not own or operate any CSO outfalls. [42]

RESPONSE 123: The Department recognizes that PVSC does not own/operate CSO outfalls; therefore, the sign provision is not needed in the Final permit. The Department agrees that it erroneously included CSM Parts IV.D.2.c in the Draft NJPDES CSO permit. Other NJPDES CSO permits issued to STPs that do not own/operate CSO outfalls did not contain this same

requirement. The Department has removed Part IV.D.2.c from PVSC's Final NJPDES CSO permit (NJ0021016).

This change affects CSM Part IV.D.2 of the Final permit for PVSC (NJ0021016).

124. COMMENT: CSO signage in Camden is often a target for vandalism. We suggest that language be included in the permit that once proof of installation is submitted, that Camden will be required to make a reasonable effort during the year to maintain the CSO signage. We suggest a provision with some flexibility that does not hold the City responsible for damage/distortion of CSO signage after its initial installation and the next scheduled monitoring visit. The CCMUA has stated that they will take responsibility for maintaining signage. [27]

RESPONSE 124: The Department understands that public signage may be targeted for vandalism. The Department is open to suggestions regarding alternative versions of signs that are not as prone to vandalism. Nonetheless, if a permittee decides on use of a sign on a post, the Department would like to permittees replace a damaged or stolen sign within a reasonable period of time. A reasonable period of time will be determined on a case-by-case basis based on the frequency of outfall maintenance trips, size of the permittee's service area, the number of vandalism events, and other such factors.

No changes have been made to the Final permit(s) as a result of this comment.

125. COMMENT: Part IV.D.2.c.ii calls for "A chart listing the distance from the shoreline." As the shoreline is not clearly defined, it would be inappropriate to require an exact distance from the "shoreline" to be given. This requirement should be modified to read: "A chart listing the approximate distance from the shoreline." [19] [21] [25] [26]

126. COMMENT: Please define "shoreline." In many instances, especially in areas subject to tidal influence and those that contain mudflats, the shoreline may not be clearly evident. The Department should not require posting of signage in wetlands. [27] [42] [44]

RESPONSE 125-126: For purposes of this permit, shoreline means the location where the land meets the water. In situations where this can vary, as with tides, the estimated mean high tide shall be used, or the permittee can indicate the distance from an alternate point of measurement.

In addition to these clarifications, the Department has revisited this permit condition and has determined it is unnecessary to require submission of this information since visual confirmation of compliance with the condition is preferred. As a result, Part IV.D.2.c has been revised in the Final permits as follows:

"c. The permittee shall install ~~submit proof that~~ signs ~~were installed~~ for each CSO~~:~~ outfall ~~–~~ ~~on or before EDP + 6 months,~~ within 6 months from the effective date of the permit (EDP), in accordance with Section F.8. The permittee shall retain information at the offices of the permittee including a chart listing the CSO outfall designator and the

physical street address/location of the sign for each CSO outfall. ~~The proof shall include all items listed below –~~

~~i. Photographs of both sides of sign installation area from the land and water sides.~~

~~ii. A chart listing the distance from the shoreline.~~

~~iii. The physical street address/location of the sign for each CSO~~."

This change affects Part IV.D.2.c and Part IV.F.8.b (which has been deleted) of the Final permits.

127. COMMENT: In Part IV.D.2.c.iii, a physical street address/location of the sign for each CSO is required. Will GPS latitude and longitude coordinates satisfy this requirement if a physical street address is not available? [28] [31]

RESPONSE 127: The regulatory purpose of an outfall sign is to notify the general public of the presence of an outfall. These signs should be in visible areas and have their location easily identified by street address. In situations where there are no streets in the immediate vicinity, the Department recommends the nearest streets be used or, if more appropriate, the name of the pier or park where the sign is located can be used.

No changes have been made to the Final permit(s) as a result of this comment.

128. COMMENT: Regarding Part IV.D.3.a, EPA supports and encourages the Department to continue working with the permittees to develop one, single integrated plan for hydraulically connected systems and believes this is the most effective and cost-efficient way to execute CSO control plan development. The National CSO Policy encourages system-wide development and implementation of the LTCP when different parts of a single CSS are operated by more than one authority. [5] [11] [18] [24]

129. COMMENT: Many of the changes in the new permits appear to be primarily aimed at inserting timelines for duties under the permit that had previously been unrestricted. We support these additions. The new permits also strongly encourage the submission of a single LTCP on behalf of the permittees in the hydraulically connected CSS which we support as well. The causes and solutions to CSO pollution extend beyond the borders of permitted entities. They are New Jersey's problem and the solution will come from a coordinated effort in many parts of the state. [7]

130. COMMENT: The permits require an annual update and benchmarks (e.g. interim compliance dates) which hopefully will reveal itself as an implementation schedule of fixed dates through the years. The policy requires a fixed date implementation schedule. [1]

131. COMMENT: It appears that time limits have been added to several of the certain smaller steps of the process. This is positive and will help us all to keep each other on schedule. [13]

RESPONSE 128-131: The Department appreciates the commenters' support regarding the timeframes for the LTCP components as imposed within Part IV Section D.3 of the permits. The Department agrees that interim compliance dates, coupled with progress report requirements, are integral to the success of the LTCP process.

No changes have been made to the Final permit(s) as a result of these comments.

132. COMMENT: Regarding Part IV.D.3.a, the provision of an extension of time is a good way to promote a single LTCP. However, Part IV.D.3.a does not quantify the extension, or even affirmatively state that an extension will be given. The permittee is always permitted to request a time extension. Delete "may request an" and replace it with "will receive a two year extension of time to the LTCP compliance schedule due dates through a permit modification." As an alternative, the Department may wish to provide an alternative schedule in the permit for those permittees that develop a single LTCP. [15] [20] [32] [35] [40] [42] [44]

133. COMMENT: The sentence "If the STP and the hydraulically connected municipalities work cooperatively to develop and implement a single LTCP, the permittee may request an extension of time to the LTCP compliance schedule due dates" has not been included in some permits although it was included in other similar permits. We recommend that this language be added. [15] [20] [32] [40] [42] [44]

134. COMMENT: Please add the sentence to Part IV.D.3.a to Newark's permit regarding an extension of time if hydraulically connected municipalities work cooperatively to develop and implement a single LTCP. In addition, please add that "approval of same will not be unreasonably withheld." [35]

135. COMMENT: The statement in Part IV.D.3.a does not come close to acknowledging the complexity of working together with the Woodcliff system communities to develop a comprehensive LTCP. The fact is that the NBMUA must work together with the communities within the Woodcliff system in order to develop a meaningful LTCP; however, working cooperatively will significantly add to the complexity and therefore the time required to perform various tasks required for the LTCP. Rather than simply allowing a request for a time extension to the LTCP compliance due dates, the Department should instead provide an alternate schedule for the Woodcliff system permittees. [33] [34]

RESPONSE 132-135: The Department maintains that a single, coordinated LTCP is the most effective and likely the most cost-effective way to execute CSO control plan development, and is consistent with practices encouraged under by the National CSO Policy. Further, the Department recognizes the added difficulties of generating a coordinated LTCP. For those hydraulically connected permittees who have committed to a single coordinated LTCP, the time frames are being extended in the Final permit as per the CSO Submittal Summary.

Given that some permittees have not yet committed to a single, coordinated LTCP, this condition has been modified in all Final permits as follows:

"a. The Department encourages a single LTCP to be developed and submitted on behalf of all of the permittees in a hydraulically connected sewer system. If the STP and the hydraulically connected muncipalities work cooperatively to develop and implement a single, coordinated LTCP, the permittee may request an extension of time to the LTCP compliance schedule due dates consistent with Part IV.D.3.b below."

The Department has not added the suggested additional language of "approval of same will not be unreasonably withheld" as the Department will consider compliance schedule due date extensions on a case by case basis.

This change affects Part IV.D.3.a of the following Final permits: CCMUA (NJ0026182), City of Camden (NJ0108812), City of Gloucester (NJ0108847), City of Perth Amboy (NJ0156132), MCUA (NJ0024741), BCUA Little Ferry STP (NJ0020028), Hackensack City (NJ0108766), Fort Lee Boro (NJ0034517), Ridgefield Park Village (NJ0109118).

136. COMMENT: We note that the Department has added in the possibility of unlimited deadline extensions. The Draft permit should be revised to impose some limit on the amount of time of the extension. Where a permit term may allow one extension of up to six months, or similar may be acceptable, an unlimited extension could potentially injure the new permits irreparably. [7]

137. COMMENT: In the Newark permit at Part IV.D.3.a, the Department removed the section that, in previous permits, gave permittees the option to request an extension of time to the LTCP compliance schedule due dates. We suggest that this requirement be removed from all permits. Currently, this section remains in the PVSC permit. Provisions that allow unlimited extensions of time are dangerous to the process and should be removed. [43]

138. COMMENT: Part IV.D.3.a allows an extension of time for a unified plan, which is reasonable, but it doesn't set any limit for the time length of that extension. There needs to be a limit to the time extension to not impede the work we are doing so that the extension does not become a 20 year extension. [13]

REPONSE 136-138: The Department maintains that additional time is appropriate to complete a single, coordinated LTCP. While the Department has modified some of the interim compliance dates as described in the CSO Submittal Summary, the Department has set firm deadlines for the submission of the LTCP, specifically at EDP +3 years or EDP +59 months (for those hydraulically connected permittees who have committed to a single LTCP).

As described in the previous response, the language in Part IV.D.3.a regarding this issue was not consistent throughout the Draft NJPDES CSO permits, but has been made consistent in the Final permits.

No additional changes have been made to the Final permit(s) as a result of these comments.

139. COMMENT: In addition to NHSA having to conduct its own LTCP activities, NHSA must coordinate with PVSC since they share receiving waters and an interconnection. Parts of

Union City and West New York tie into PVSC. We request that a meeting be held with the Department and PVSC in an effort to coordinate and ensure the timely completion of all CSO related provisions are met in the reissued permit. [48]

RESPONSE 139: The Department is willing to meet with PVSC, NHSA, and any other interested parties regarding the coordination between all parties to ensure timely completion of all CSO related provisions in accordance with the permits. The Department has extended the timeline for a single LTCP for hydraulically connected municipalities to allow time for coordination.

No changes have been made to the Final permit(s) as a result of this comment.

140. COMMENT: The City of Elizabeth and JMEUC have already met to coordinate their efforts in providing an LTCP. The Department must establish the requirements for the JMEUC for the treating of the CSO flows from the City of Elizabeth, including consideration of "blending" secondary treated flow with treated CSO flows. This CSO treatment option has a major impact upon the development and evaluation of conveyance, storage, and pumping limitation alternatives in the City of Elizabeth LTCP. Also, since some of the hydraulically connected municipalities to the City of Elizabeth CSS are members of the JMEUC, they are the regulatory entity that has some input in their cooperation with the City of Elizabeth in developing the City's LTCP. The City of Elizabeth reserves the right to request an extension of time in the LTCP compliance schedule due dates as these issues are resolved. [12]

141. COMMENT: Part IV.D.3.a indicates that an LTCP is needed from JMEUC. While the STP capabilities to process additional flow will be part of the LTCP, the primary responsibility of that submission must be with the City of Elizabeth; where JMEUC will process the flows mandated by the approved LTCP. [9]

RESPONSE 140-141: The Department applauds JMEUC and the City of Elizabeth for already meeting to coordinate their efforts to ensure a proactive approach. LTCP requirements are included in NJPDES CSO permits for both JMEUC and the City of Elizabeth where both parties are responsible for ensuring that an LTCP is completed. Committing to a single, coordinated LTCP will serve to help coordinate issues such as the ones raised in this comment. As described previously, the Department has extended several of the interim compliance dates and has extended the LTCP due date for those hydraulically connected permittees who have agreed to a single LTCP. Please refer to **RESPONSE 95-100** in Section D of the Response to Comments document regarding "blending."

No changes have been made to the Final permit(s) as a result of these comments.

142. COMMENT: It appears that there is a presumption that many LTCP preparation tasks will be conducted simultaneously to comply with the proposed schedule of three years. When the LTCP process is divided into specific work elements, it becomes obvious that many tasks must be sequential and not simultaneous.

As an example, a collection system model that must be used to establish a baseline for CSO frequency and volume cannot proceed until the collection system is characterized to the degree needed to build the model and flow data is collected to calibrate the model. Valid flow data is essential for the calibration of the model and the time required to collect this data can be many months, depending on weather conditions, so that a sufficient range of rain events can be captured to properly calibrate the model. It is not until the collection model is built and calibrated that the water quality modeling can proceed with accurate inputs for CSO loadings. Once this two-step modeling approach is completed, then the baseline conditions can be defined and alternatives identified and evaluated. This modeling process alone, just for Fort Lee, may take two to three years to complete when the time is added up for data collection, collection system model development and calibration, water quality model development and calibration, baseline determination and alternatives evaluation. These modeling tools are essential for developing integrated CSO LTCPs and identifying and selecting cost effective controls. [28] [31]

RESPONSE 142: Modeling was a required component of the MGP; therefore, permittees should already have some completed work to build on, although the definition of "event" has been changed in the NJPDES CSO permit renewals. Nonetheless, the Department acknowledges that, in some cases, LTCP preparation tasks may have to occur sequentially, rather than simultaneously, for many tasks, not just those related to modeling. Permittees are encouraged to perform tasks simultaneously, to the best of their ability, to comply with the schedules identified in the Final permit. Note that the Department has modified many of the interim compliance dates as summarized in the CSO Submittal Summary due in part to concerns such as those expressed in this comment.

No changes have been made to the Final permit(s) as a result of this comment.

143. COMMENT: Part IV.D.3 discusses the LTCP time constraints. Again, this is something that has to be done with the NBMUA and further emphasizes the need for simultaneous permit issuance. [29]

RESPONSE 143: The Department agrees that the coordinated issuance of all NJPDES CSO permits is integral to the timing issues set forth in the permits. The Department has issued all 25 NJPDES CSO Final permits with the same effective date.

No changes have been made to the Final permit(s) as a result of this comment.

144. COMMENT: As described in Part IV.D.2.a, the Department encourages a single LTCP to be developed and submitted on behalf of all the permittees. However, will permittees that develop a single LTCP be penalized if one or more of the LTCP groups' permittees does not meet deadlines or does not submit information to the LTCP group in order to meet deadlines required in the permit such as Part IV.D.3.b, c and d? [6] [15] [20] [29] [32] [35] [42] [44]

145. COMMENT: Permittees that develop a single LTCP should not be penalized if one or more of the LTCP groups' permittees does not meet deadlines or does not submit information to the LTCP group to meet deadlines required in the permit. This should be clarified. [40]

146. COMMENT: LTCPs should include a fixed date implementation schedule and the deadlines contained therein should be publically enforceable. [3]

RESPONSE 144-146: Any permittee who does not meet the submittal deadlines for any part of the NMCs or LTCP may be subject to enforcement action in accordance with N.J.A.C. 7:14A-2.9. This will be determined on a permit-to-permit and case-by-case basis. Please refer to **RESPONSE 72-85** of Section B of the Response to Comments document as well as Part IV.G.10.

No changes have been made to the Final permit(s) as a result of these comments.

147. COMMENT: Part IV.D.3.b requires submission of "an approvable LTCP that will include the elements contained in Section G." This section then proceeds to supply additional details for various work plans. The selected LTCP approach must be submitted within 36 months from the permit issuance date. It is not apparent how NHSA could possibly submit an "approvable LTCP" or the work plans since this requires feedback from the Department on several items. This provision should be revised to include additional time for the Department's review and approval of such plans. [25]

148. COMMENT: The permit schedules do not currently include time periods or a schedule for review and approval of work plans or other deliverables by the Department. Will the Department be reviewing any or all permit required deliverables and approving each and all of those prerequisite deliverables before the permittee undertakes a subsequent task, or will the Department just review and approve the final LTCP? If approval of each deliverable is not given before the commencement of a subsequent task, it is possible that the subsequent task, up to including the entire final LTCP, could be deficient and will require revision. This would result in an inefficient use of taxpayer funding and would delay the final approval of the LTCP and the commencement of the implementation of that Plan. [6] [20] [28] [31] [35] [40] [42]

149. COMMENT: The schedule for developing the LTCP must include time for regulatory review of work plans and other documents; however, the permit schedules do not show review and approval of work plans or deliverables by the Department. Are we to interpret this omission to assume that the Department will not review and approve any interim work other than the final LTCP? If work plans and other required submittals will be reviewed and approved by the Department, how much time should be allotted in the LTCP schedule for these approvals? [15] [20] [28] [31]

150. COMMENT: The permit does not include interim milestones for Department approvals of work plans or draft reports so the permittee has no feedback through this process to assure compliance. The permittee may submit an LTCP, but does not have the authority to approve the LTCP. PVSC requests that the Department include interim milestones for Department approvals before beginning work and interim reviews of draft reports prior to final report submission. PVSC requests that all submittal deadlines be adjusted to reflect Department review and comment periods. A listing of the typical tasks that may be needed to comply with this permit is included as an attachment to the comments. [15] [42] [44]

151. COMMENT: Various submissions have been assigned very tight schedules. These submissions often need feedback from the Department in order to be completed. How is this to be addressed within the specified timeframes? JMEUC notes the importance of the development of this LTCP on water quality goals and the fiscal resources that will be required. JMEUC also notes the schedule included in the Draft permit for the completion of planning activities and submission of relevant reports and documents. Considering the number of stakeholders with interest in this project and the need to cooperatively develop the CSO LTCP, JMEUC requests the schedule for completion of the LTCP components be lengthened. [9]

152. COMMENT: Various submissions within the permit establish very tight schedules that often require feedback from the Department in order to complete these reports. How is this to be addressed within the specified timeframes? In essence, as we move forward with providing the reports and documentation to the Department, will there be some flexibility in the schedule as the process moves on? [25] [48]

RESPONSE 147-152: The Department will be reviewing work plans and other reports as itemized in Part IV.D.3.b, c and d as they are submitted. The Department is aware of the sequential nature of the tasks and agrees that timely review of the submissions is imperative to the success of the NJPDES CSO program. As described in **RESPONSE 64-70** of Section B of the Response to Comments document, the Department has modified Part IV.D.1.a to allow time for the permittee to respond to technical deficiencies which is particularly important for the work plan process. Time delays by the Department and other unforeseen circumstances are addressed in **RESPONSE 55-62** of Section B of the Response to Comments document. Additionally, the Department has modified several of the interim compliance dates and is allowing a 59 month schedule for LTCP submission for those hydraulically connected permittees who wish to submit a single, coordinated LTCP.

While the Department has modified the CSO Submittal Summary and Part IV.D.2.a, no other changes to the Final permits have been made as a result of these comments.

153. COMMENT: Part IV.D.3.b.i requires that a System Characterization Work Plan for the LTCP be completed by EDP +3 months. This cannot be a generic work plan given the level of detail required to develop comprehensive collection system and water quality models. Please extend this milestone to EDP +6 months. [28] [29] [31]

154. COMMENT: The three month schedule for the System Characterization Work Plan is not enough time to develop a water quality and modeling work plan for the ambient waters which the CSO outfalls discharge to. This work has not been done in compliance with any previous permits. The time period for work plan submittal should be increased to EDP +6 months. [6] [15] [20] [26]

155. COMMENT: The three month schedule for the System Characterization Work Plan is not enough time to develop a water quality and modeling work plan for the ambient waters which the CSO outfalls discharge to. This work has not been done in compliance with any previous

permits. Therefore, the time period for work plan submittal should be increased to EDP +9 months for a draft work plan, and EDP +12 months for a final work plan. [35] [42] [44]

156. COMMENT: The hiring of a consultant to modify an existing System Characterization Work Plan or prepare a new one will take several months alone, so the three month schedule is not enough time. [35]

157. COMMENT: PVSC requests that "EDP +3 months" be revised to "EDP +6 months" for Part IV.D.3.b.i. Procurement of services takes a minimum of 10 weeks to draft a Request for Qualifications and Proposal, advertise and contract with the chosen firm. [42]

158. COMMENT: The deadline for Section i should be changed to EDP +12 months. [25]

RESPONSE 153-158: The Department agrees that modifications to the System Characterization Work Plan requirement are appropriate and has modified Part IV.D.3.b.i in the Final permits as follows:

"i. Step 1a – System Characterization Work Plan ~~Workplan~~ for the LTCP – In accordance with Section G.1., unless otherwise approved by the Department in writing, the permittee shall submit an approvable System Characterization Work Plan: within ~~on or before~~ 6 months from the effective date of the permit (EDP) ~~+3 months~~."

In addition to this extension of time, and as described in **RESPONSE 64-70** in Section B of the Response to Comments document, the inclusion of the phrase "unless otherwise approved by the Department in writing" is consistent with revisions to Part IV.D.2.a which allows for time in the schedule to address technical deficiencies that may occur as part of the work plan approval process.

This change affects Part IV.D.3.b.i of the Final permits.

159. COMMENT: Part IV.D.3.b.ii requires that a System Characterization Report be completed on or before EDP +12 months. The 12 month schedule for the System Characterization Report is not enough time as much of this work has not been done in compliance with any previous permits. Therefore, the time period for report submittal should be increased to EDP +30 months. [20] [29] [40]

160. COMMENT: The 12 month schedule for the System Characterization Report is not enough time to complete the reports as much of this work has not been done in compliance with any previous permits. Therefore, the time period for report submittal should be increased to EDP +36 months. [35] [42] [44]

161. COMMENT: The deadline for the System Characterization Report should be modified to on or before EDP +48 months. This time is necessary to accommodate the GIS work that must be completed. [26]

162. COMMENT: PVSC request that "EDP +12 months" be revised to "12 months following the NJDEP's approval of the System Characterization Workplan." [42]

163. COMMENT: Because the System Characterization Report cannot be started until the work plan is approved by the Department, the schedule to complete this task allows only nine months, less the time that the Department requires to approve the work plan. The time allowed to complete the report should be 12 months following approval of the work plan by the Department. For those sections of the System Characterization Report that include "water quality impacts from CSOs" (G.1.a.) and "ambient in-stream monitoring for pathogens" (G.1.b.iii.), the time period for submission should be increased to 24 months following the approval of the work plan. [6] [15]

164. COMMENT: The System Characterization Report includes several LTCP components including Characterization, Monitoring and Modeling of the Combined Sewers (G 1), Public Participation Process (G 2) and Consideration of Sensitive Areas (G 3). Eighteen months will be required to develop a comprehensive sewer map depicting the actual locations of the separate and combined sewers, storm sewers, CSO regulators and outfalls owned and operated by the permittee with flow direction and manhole invert elevations. Once this information is complete, then collection modeling can start which will require collection of flow data for model calibration. Once the collection system model is developed and calibrated then it will be able to be used to establish baseline conditions and produce CSO inputs for the water quality model, which will also require calibration. This complicated process is a sequential process that will require 30 months to complete, so the time allowed for submission of the system Characterization Report should be changed to EDP +30 months. [28] [31] [32]

RESPONSE 159-164: The Department has revisited the time needed to complete the System Characterization Report in consideration of the inherent complexity and Part IV.D.3.b.ii has been modified in the Final permits in both content and format where this permit condition now extends into Part IV.D.3.b.ii-iv. Note that there are two versions of this language where one version is for those permittees who will be submitting separate LTCPs and another version for those permittees who have committed to a single, coordinated LTCP. For those permittees who will be submitting separate LTCPs, these permit conditions are as follows:

"ii. Step 1b1 – In accordance with G.1., ~~G.2 and G.2.,~~ the permittee shall submit the System Characterization Report~~, the Public Participation Process, and Consideration of Sensitive Areas of the LTCP~~: within 24 months from the effective date of the permit ~~on or before~~ (EDP) ~~+12 months~~.

iii. Step 1b2 – In accordance with G.2., the permittee shall submit the Public Participation Process Plan: within 24 months from the effective date of the permit (EDP).

iv. Step 1b3 – In accordance with G.3., the permittee shall submit the Consideration of Sensitive Areas information of the LTCP: within 24 months from the effective date of the permit (EDP)."

For those permittees who will be submitting single, coordinated LTCPs, these permit conditions are as follows:

"ii. Step 1b1 – In accordance with G.1., ~~G.2 and G.2.,~~ the permittee shall submit the System Characterization Report~~, the Public Participation Process, and Consideration of Sensitive Areas of the LTCP~~: within 36 months from the effective date of the permit ~~on or before~~ (EDP) ~~+12 months~~.

iii. Step 1b2 – In accordance with G.2., the permittee shall submit the Public Participation Process Plan: within 36 months from the effective date of the permit (EDP).

iv. Step 1b3 – In accordance with G.3., the permittee shall submit the Consideration of Sensitive Areas information of the LTCP: within 36 months from the effective date of the permit (EDP)."

As noted above, the Department wishes to encourage permittees to coordinate with their hydraulically connected municipalities and STPs to submit a single, coordinated LTCP. Additional time is being provided for in the Final permit where coordination is occurring.

This change affects Part IV.D.3.b.ii-iv of the Final permits.

165. COMMENT: Part IV.D.3.b.iii requires submission of the Development and Evaluation of Alternatives Report for the LTCP to be completed by EDP +24 months. The evaluation of alternatives cannot start until the models are developed and calibrated and baseline conditions are established which we believe will be EDP +30 months. Therefore, given the sequential nature of the Characterization, Monitoring and Modeling effort, we request that the submission date for the Development and Evaluation of Alternatives Report be EDP +42 months to allow a comprehensive evaluation of an integrated approach to CSO controls. [28] [31]

166. COMMENT: Rather than EDP +24 months, submission of an approvable Development and Evaluation of Alternatives Report should be on or before EDP +36 months. [20] [29] [31] [32]

167. COMMENT: Part IV.D.3.b.iii, PVSC requests that the Department revise the submittal requirement to include a draft report submission on or before EDP +51 months and a final report submission on or before 3 months from receipt of the Department's comments on the draft report. [42]

168. COMMENT: This section should be changed to"... submit an approvable Development and Evaluation of Alternatives Report on or before EDP +54 months." [35] [42] [44]

169. COMMENT: The Development and Evaluation of Alternatives Report should be submitted 12 months following the approval by the Department of the Characterization Report. [6] [15]

RESPONSE 165-169: Given the fact that the compliance date for the System Characterization Report has changed and the preceding permit conditions have been renumbered, it is appropriate to revise the permit condition for the Development and

Evaluation of Alternatives. For those permittees who will be submitting separate LTCPs, Part IV.D.3.b.v (formerly Part IV.D.b.iii) has been modified in the Final permits as follows:

"v~~iii~~. Step 2 – Development and Evaluation of Alternatives for the LTCP – In accordance with Sections G.2. through G.5. and G.9, the permittee shall submit an approvable Development and Evaluation of Alternatives Report: within 30 months from the effective date of the permit ~~on or before~~ (EDP) ~~+24 months~~."

For those permittees who will be submitting single, coordinated LTCPs, Part IV.D.3.b.v (formerly Part IV.D.b.iii) has been modified in the Final permits as follows:

"v~~iii~~. Step 2 – Development and Evaluation of Alternatives for the LTCP – In accordance with Sections G.2. through G.5. and G.9, the permittee shall submit an approvable Development and Evaluation of Alternatives Report: within 48 months from the effective date of the permit ~~on or before~~ (EDP) ~~+24 months~~."

This change affects Part IV.D.3.b.v of the Final permits.

170. COMMENT: Part IV.D.3.iv states "submit an approvable Selection and Implementation of Alternatives Report: on or before EDP +36 months." The Report should be required to be submitted 12 months following the approval by the Department of the Development and Evaluation of Alternatives Report. [6] [15]

171. COMMENT: Given the sequential nature of the Characterization, Monitoring and Modeling effort, the submission of an approvable Selection and Implementation of Alternatives Report should be required on or before EDP +52 months. [20] [28] [29] [31] [32]

172. COMMENT: The due date for the Selection and Implementation of the LTCP should be modified to "…on or before EDP +54 months." [26]

173. COMMENT: This section should be changed to "submit an approvable Selection and Implementation of Alternatives Report: on or before EDP +59 months." Please modify the permit to reflect this increase in the time for submittal. [35] [42] [44]

174. COMMENT: Part IV.D.3.b.iv, PVSC requests that the NJDEP revise the submittal requirement to include a draft report submission on or before EDP +56 months, and a final report submission on or before 3 months from receipt of the Department's comments on the draft report. [42]

RESPONSE 170-174: Given the fact that the compliance date for the Selection and Implementation of Alternatives Report has changed and the preceding permit conditions have been renumbered, it is appropriate to revise the permit condition for the Selection and Implementation of the LTCP. For those permittees who will be submitting separate LTCPs, Part IV.D.3.b.vi (formerly Part IV.D.b.iv) has been modified in the Final permits as follows:

"~~i~~vi. Step 3 – Selection and Implementation of the LTCP: In accordance with Sections G.2. and G.6. through G.9, the permittee shall submit an approvable Selection and Implementation of Alternatives Report: within 36 months from the effective date of the permit ~~on or before~~ (EDP). ~~+36 months~~"

For those permittees who will be submitting single, coordinated LTCPs, Part IV.D.3.b.vi (formerly Part IV.D.b.iv) has been modified in the Final permits as follows:

"~~i~~vi. Step 3 – Selection and Implementation of the LTCP: In accordance with Sections G.2. and G.6. through G.9, the permittee shall submit an approvable Selection and Implementation of Alternatives Report: within 59 months from the effective date of the permit ~~on or before~~ (EDP). ~~+36 months~~"

This change affects Part IV.D.3.b.vi of the Final permits.

175. COMMENT: The schedule set at Part IV.D.3.b is too aggressive and does not consider the need to collect/conduct additional wet weather sampling within an established time frame that may or may not produce adequate wet weather events. The schedule for completion of these tasks should be modified as follows: System Characterization Work Plan - on or before EDP +17 months; System Characterization Reports - on or before EDP +53 months, and Selection and Implementation of the LTCP - on or before EDP +84 months. [25]

176. COMMENT: The best and most logical approach for use of the data is to consider the results of the completed baseline CMP assessment before the alternatives are fully evaluated. This will impact the completion time frames of Parts IV.D.3.b.iii and iv by increasing them by 12 months. So it is requested that the completion times be adjusted as follows: Development and Evaluation of Alternatives – change "EDP+24 months" to "EDP+36 months"; and Selection and Implementation of the LTCP – change "EDP+36 months" to "EDP+48 months." [30]

177. COMMENT: The schedule for completion of all of these tasks is too aggressive and does not consider the need to collect/conduct additional wet weather sampling within an established time frame that may or may not produce adequate wet weather events. Each of these sections, Part IV.D.3.b.i, D.3.b.ii, and D.3.b.iii should be modified to read: "Unless otherwise approved by the Department, the permittee shall develop the requirement with 6 months of additional time." [19] [21]

RESPONSE 175-177: As described in **RESPONSE 55-62** of Section B of the Response to Comments document and as indicated in the CSO Submittal Summary, the Department has modified the compliance dates for these components as follows: System Characterization Work Plan – EDP+6 months; System Characterization Reports - on or before EDP +24 months for separate LTCPs; EDP +36 months for single, coordinated LTCPs; Development and Evaluation of Alternatives - on or before EDP +30 months for separate LTCPs; EDP +48 months for single, coordinated LTCPs; and Selection and Implementation of the LTCP - on or before EDP +36 months for separate LTCPs; EDP +59 months for single, coordinated LTCPs.

No additional changes have been made to the Final permits as a result of these comments.

178. COMMENT: Part IV.D.3.c states "In accordance with Section G.9, the permittee shall submit an approvable baseline Compliance Monitoring Program (CMP) Work Plan: on or before EDP +3 months." Although there is some ambient data available for the Passaic, Hudson, and Hackensack Rivers, very little sampling data is available for the smaller tributaries to these waterbodies. Therefore, delete "EDP +3" and replace it with "EDP +6." [20] [40]

179. COMMENT: Although there is some ambient data available for the Passaic, Hudson, and Hackensack Rivers, very little sampling data is available for the small tributaries to these waterbodies. Therefore, delete "EDP +3" for the CMP Work Plan and replace it with "EDP +12." This sampling can be weather dependent. [29]

180. COMMENT: Although there is some ambient data available for the Passaic, Hudson, and Hackensack Rivers, very little sampling data is available for the smaller tributaries to these waterbodies. Therefore, delete "EDP +3" for the CMP Work Plan and replace it with "EDP +9 months" and "EDP +12 months for a final work plan." [35] [42] [44]

181. COMMENT: Although there is some ambient data available for the Arthur Kill, very little sampling data is available for the Elizabeth River. Therefore, delete "EDP +3" for the CMP Work Plan and replace it with "EDP +6." [15]

182. COMMENT: The City is requesting a time extension for submitting an approvable baseline CMP Work Plan from on or before EDP +3 months to EDP +12 months in order to be able to coordinate activities with all of the hydraulically connected communities. [12]

183. COMMENT: Part IV.D.3.c should be prefaced with: "Unless otherwise approved by the Department the permittee shall develop…." Additionally, the deadline for the CMP Work Plan in condition i should be modified to: "… on or before EDP +12 months." [19] [21] [26]

184. COMMENT: Regarding submission of an approvable baseline CMP Work Plan on or before EDP +3 months, NBMUA will work together with the Town of Guttenberg to address compliance monitoring and will work with the PVSC CSO Group and the Harbor Discharger Group regarding receiving water characterization, since the Hudson River is also the receiving water for many CSSs within the PVSC system. Such coordination is valuable in that it can help minimize overall costs and maximize consistency of approach and data; however, it does take more time and effort to do so. Since baseline compliance monitoring will be performed during system characterization monitoring, the compliance monitoring work plan should be prepared at the same time as the system characterization work plan.

The time period for the CMP Work Plan submittal should therefore be increased to EDP +9 months for a draft, and EDP +12 for the final work plan. This allows 30 days for the Department to provide comments, and 60 days for NBMUA to finalize the work plan in response to the comments. This comment also applies to the Department's proposed CSO permit for the Town of Guttenberg. [33] [34]

RESPONSE 178-184: The Department agrees that additional time is appropriate for the CMP Work Plan and Part IV.D.3.c has been modified in the Final permits as follows:

"c. In accordance with Section G.9., the permittee shall submit an approvable baseline Compliance Monitoring Program (CMP) W~~w~~ork P~~p~~lan: within 6 months from the effective date of the permit (EDP) ~~on or before EDP + 3 months~~."

This change affects Part IV.D.3.c of the Final permits.

185. COMMENT: Regarding Part IV.D.3.c, will the State extend the deadline for completing the CMP in the event the work plan is not approved in a timely fashion? [20] [35] [40] [42] [44]

RESPONSE 185: Time delays by the Department and other unforeseen circumstances are addressed in **RESPONSE 55-62** of Section B of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

186. COMMENT: The Department has not yet adopted a guidance document for ambient in-stream monitoring. Without such a critical document available for review, the comment period should be extended until at least 30 days following the issuance of the guidance document. [15] [32] [35] [40] [42] [44]

187. COMMENT: The Department has not yet established guidance for the ambient in-stream monitoring required under this subpart. Therefore, it is inappropriate to include a requirement in the permit where the permittee cannot determine the scope of work required and whether such a requirement is reasonable under the time frame specified in the permit. [19] [25]

RESPONSE 186-187: The commenters are correct in that Part IV.G.9.a.i referred to a guidance document and website link that was "To Be Determined." Since the Draft NJPDES CSO permits were issued, the DWQ has completed a guidance document entitled *Receiving Waters Monitoring Work Plan Guidance for the CSO Program.*

The Department shared this guidance document with NJPDES CSO permittees and accepted comments on it. Release of this final document has occurred concurrently with the finalization of the NJPDES CSO permits, where the document will be available at http://www.state.nj.us/dep/dwq/cso.htm. Part IV.G.9.a.i has been modified in the Final permits as follows:

"i. Ambient in-stream monitoring may be performed in accordance with the guidance document entitled: "Receiving Waters Monitoring Work Plan Guidance for the CSO Program" at www.state.nj.us/dep/dwq ~~*[Document Name]* at *[website link]- To Be Determined*~~."

Reference to this document is not in Part IV.D.3.c, but rather Part IV.G.9.a.i which is the appropriate place for this link. No additional changes to Part IV.D.3.c in the Final permits have been made as a result of these comments.

188. COMMENT: Part IV.D.3.b.ii concerns submission of the System Characterization Report, the Public Participation Process, and Consideration of Sensitive Areas. In addition to the fact that the work plan alone will take 12 months to prepare, the characterization will include a thorough review of the entire collection system in order to identify the frequency and characteristics of CSOs in response to precipitation events, as well as characterize the water quality impacts that result from CSOs.

Much of this work has not been done in compliance with any previous permits. The impacts from a range of precipitation events will need to be captured and evaluated and a single-year sampling program cannot be expected to provide the information needed to characterize the system. Working with multiple entities means that additional time will need to be allotted for assembly of existing information and review of draft submissions. In addition, NBMUA intends to work with the PVSC CSO Group and the Harbor Discharger Group regarding receiving water characterization, since the Hudson River is also the receiving water for many CSSs within the PVSC system. Therefore, NBMUA's schedules for the System Characterization Work Plan and final report should coincide with the schedules for the PVSC CSO permittees. At least 24 months will be required after the Department's approval of the work plan to complete the system characterization study. Therefore, the time period for report submittal should be 24 months after the Department's approval of the System Characterization Work Plan, or at least EDP +36 months.

Monitoring of the ambient waterbodies will be needed to address the questions of WQS attainment and protection of designated uses. Previous permits required a baseline monitoring report for the sewer system and the CSO point, but not the water quality condition of the Hudson River into which the CSO discharges. This effort was not included in any previous permitting work, although some of the required monitoring in the Hudson River may have been carried out by other federal and state programs. Additional ambient sampling may need to be performed during specific seasons and under prescribed conditions. A single-year sampling program cannot be expected to provide the information needed to determine a truly representative ambient baseline.

The baseline compliance monitoring data should be submitted along with the system characterization report (Part IV.D.3.b.ii) since baseline compliance monitoring will be performed during system characterization monitoring. There is no need to require a separate CMP Report (Part IV.D.3.d), since only baseline data will be available during the permit cycle. Should the Department decide to keep the CMP Report requirement, it should be called the Baseline CMP Report to clarify that only baseline condition data will be included. The time period for submittal of any Baseline CMP Report should be no less than 24 months after Department approval of the CMP Work Plan, or at least EDP +36 months, and commensurate with the System Characterization Report. This comment also applies to the Department's proposed CSO permit for the Town of Guttenberg where the request for extension is EDP+30 months. [29] [33] [34]

189. COMMENT: Submission of a CMP Work Plan (Part IV.D.3.c) should be merged into the System Characterization Work Plan for the LTCP (Part IV.D.3.b i) and the milestone date should be extended to EDP +6 months to provide sufficient time for all the elements of G 9 to be addressed. Preparation of this work plan is also contingent on the Department identifying the parameters of concern, so please include "The work plan will include water quality parameters that will be identified by DEP." [28] [31]

RESPONSE 188-189: As noted in the CSO Submittal Summary, the Department is requiring submission of the following: CMP Work Plan – due on or before EDP +6 months; CMP Report – due on or before EDP +24 months for separate LTCPs and EDP +36 months for coordinated LTCPs; System Characterization Work Plan – due on or before EDP +6 months; and System Characterization Report – due on or before EDP +24 months for separate LTCPs and EDP +36 months for coordinated LTCPs.

The commenters are requesting that the CMP Work Plan be merged with the System Characterization Work Plan where data collected as part of this Work Plan will be summarized in the System Characterization Report. Alternatively, the commenters are requesting that the CMP Work Plan and Report be entitled the "Baseline CMP Report."

The Department agrees that the CMP Work Plan and the System Characterization Work Plan may be submitted concurrently inasmuch as both work plans require ambient monitoring. The CMP Work Plan and CMP Report focuses on ambient conditions in the receiving water body as per Part IV.G.9. In contrast, the System Characterization Work Plan and Report focuses on the entire hydraulically connected system characterization, which includes modeling of the system.

With respect to the comment regarding parameters of concern, these details are best left to the Work Plan; however, permittees should be prepared at a minimum to look at pathogens. Please refer to **RESPONSE 199** of Section B of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of these comments.

190. COMMENT: Regarding Part IV.D.3.d, the City of Elizabeth is requesting an extension of the submission of an approvable baseline Compliance Monitoring Plan report and data from on or before EDP +12 months to EDP +24 months. This report will require information be obtained on the water quality of the Elizabeth River, Peripheral Ditch and Great Ditch as well as the measurement of E Coli in the CSO discharges. The report requires CSO data on water quality, dates and times of discharges from each CSO point. [12]

191. COMMENT: The general requirement is for compliance monitoring to be performed prior to, during, and following implementation of the LTCP. Since the LTCP will not be implemented for a minimum period of EDP +36 months, the deadline for submission of the baseline CMP Report of EDP +12 months is unreasonable and should be modified to read: "…on or before EDP +24 months." [19] [21] [26]

192. COMMENT: Please incorporate the following change to Part IV.D.3.d: "In accordance with Section G.9., and the approved work plan, the permittee shall submit an approvable baseline CMP Report and data: EDP +2 years." [15]

193. COMMENT: The general requirement is for compliance monitoring to be performed prior to, during, and following implementation of the LTCP. Since the LTCP will not be implemented for a minimum period of EDP +36 months, the deadline for submission of the baseline CMP Report of EDP +12 months is unreasonable and should be modified to read: "…on or before EDP +30 months." [25]

194. COMMENT: Regarding the submission of the approvable baseline CMP Report and data at Part IV.D.3.d, please delete EDP +12 months and replace it with "EDP +36 months." [42]

195. COMMENT: Part IV.D.3.d requires submission of a Baseline CMP Report before EDP +12 months. This cannot be completed until the System Characterization studies and related modeling are completed which we believe will be EDP +30 months because of the sequential nature of the work. While it is difficult to put a timeframe on completion of the Baseline CMP because water quality parameters and presence of Sensitive Areas are not yet known, we request the submittal date for the CMP Report be extended to EDP +36 months which will allow the results of the System Characterization studies and all the requirements of G 9 to be included in the report. [28] [31]

196. COMMENT: A less than one and one half year time period, depending on approval of the work plan, may not be enough time to complete the CMP Report. Subsequent phases of the LTCP, such as deciding between Presumptive and Demonstrative approaches, and determining levels of CSO control that is needed, also depend on the results of the CMP. [6]

197. COMMENT: Part IV.D.3.c and Part IV.D.3.d require the submittal of an approvable CMP work plan in 3 months and the CMP Report and data within 9 months after that. Based upon the experience of our consultant who has completed such a program for another municipality of similar size to the Jersey City CSS, the time frame to complete that program was as follows: 6 months to develop the CMP work plan; 1 month for regulatory review and comment on the CMP work plan; 1.25 months to address the comments and obtain approval of the work plan; 1 month for preparation of the sampling program with a staff of 12, a vessel, lab coordination, forecast alert system, etc.; 3 months of dry and wet weather monitoring; 3 months of dry and wet weather monitoring; and 6 months to prepare, submit, and address comments on the CMP report and data to obtain an approvable CMP report.

This program took 18 months to complete where the time for regulatory review took only 4 months. The 12 month period to complete a CMP with a work plan is too short and should be extended. A 24 month time period is requested for this type of a program to be completed; and this time period also anticipates that the total Department review and comment period is limited to 6 months. [30]

RESPONSE 190-197: The Department recognizes that the Draft permits specified that the CMP Work Plan is due on or before EDP +3 months. As described in **RESPONSE 178-184**

of Section B of the Response to Comments document, the Department has allotted additional time for the work plan process to be completed. The Department has also determined that additional time is appropriate for submission of the CMP Report to account for sampling delays or unforeseen weather conditions. For those permittees who will be submitting separate LTCPs, Part IV.D.3.d has been modified in the Final permits as follows:

"d. Unless otherwise specified by the Department, in ~~In~~ accordance with Section G.9. and the approved work plan, the permittee shall submit an approvable baseline CMP Report and data: within 24 months from the effective date of the permit (EDP) ~~on or before EDP + 12 months~~."

For those permittees who will be submitting single, coordinated LTCPs, Part IV.D.3.d has been modified in the Final permits as follows:

"d. Unless otherwise specified by the Department, in ~~In~~ accordance with Section G.9. and the approved work plan, the permittee shall submit an approvable baseline CMP Report and data: within 36 months from the effective date of the permit (EDP) ~~on or before EDP + 12 months~~."

With respect to the comment stating that permittees can not complete Part IV.G.9 prior to completing Part IV.G.1, the Department disagrees. Because there is overlap between Part IV.G.9 and Part IV.G.1, the Department maintains that conduct of these study components can occur concurrently.

This change affects Part IV.D.3.d of the Final permits.

198. COMMENT: Part IV.D.3.d states "In accordance with Section G.9., and the approved work plan, the permittee shall submit an approvable baseline CMP Report and data: on or before EDP +12 months." Section G.9.a. states "…to verify baseline and existing conditions…compliance with WQS, and protection of designated uses." A comprehensive monitoring and modeling of the ambient waterbodies are needed to address the questions of WQS attainment and protection of designated uses. Previous permits required a baseline monitoring report for the sewer system and the CSO points, but not the water quality condition of the waterbodies that the CSO outfalls discharge to. This effort, which includes ambient sampling and modeling to determine compliance with WQS and designated uses, was not included in any previous permitting work. Some of the required work may have been carried out by other federal and state programs, but little work was performed in the small tributaries into which the CSO outfalls discharge. [6] [20] [32] [35] [40] [42] [44]

RESPONSE 198: The commenter is correct in that Part IV.G.9.a concerns the CMP. Please note that this is separate from Characterization, Monitoring and Modeling as described in Part IV.G.1. While both studies require ambient monitoring and there is some overlap, the CMP is focused on short term ambient monitoring and the Characterization, Monitoring and Modeling is a comprehensive study that focuses on the entire system.

The Department acknowledges that there are elements of these studies that may not be available from previous permits and this work involves a comprehensive evaluation of the system. The Department has granted additional time frames in accordance with **RESPONSE 190-197** of Section B of the Response to Comments document.

No additional changes have been made to the Final permit(s) as a result of this comment.

199. COMMENT: The ambient and benthic sampling can only be done at certain times of the year to capture the entire life cycle of the organisms. Also, a single year sampling program should not be expected to provide the information needed to determine a truly representative ambient and benthic baseline. Therefore the ambient sampling program should be repeated for a second year when needed.

It is requested that Part IV.D.3.d be modified to delete "EDP +12 months" and replace it with either "EDP +30 months" or "EDP +36 months." [20] [32] [35] [40] [42] [44]

RESPONSE 199: The Department is not mandating benthic data as described in this comment. The baseline CMP Report and data is intended to establish the conditions over time to document a trend based on the implementation of CSO controls. While the Department is requiring ambient data for pathogens as a minimum, the reduction in flow volume will relate to the reduction in pollutants and toxics. Pathogens are intended to serve as an indicator parameter. Please refer to the guidance document entitled *Receiving Waters Monitoring Work Plan Guidance for the CSO Program* for additional information as available at www.state.nj.us/dep/dwq. Also, the permittee may use previous studies for the baseline CMP Report to the extent that they are accurate and representative. Approval for the use of existing data shall be requested as part of the work plan. As described in **RESPONSE 190-197** of Section B of the Response to Comments document, the Department has extended the submittal date for the CMP Report.

While Part IV.D.3.d has been modified as described in a previous response, no additional changes have been made to the Final permit(s) as a result of this comment.

200. COMMENT: Part IV.D.3.d requires the completion of a baseline CMP report and data on or before EDP +12 months. Part IV.G.9 indicates that the work plan to be approved by the Department and details monitoring protocols. It is unclear as to whether the Department is requiring direct monitoring of all CSO outfalls, or whether the duration, quantity, and quality data can be generated through the computer model developed under the System Characterization requirement. Acceptability of the approved computer model should be noted in the permit. Five of the requirements (ii – vi) would be answered using the computer model developed under the System Characterization Work Plan and thus, are duplicative requirements. Additionally, it is not clear as to the time period to be covered by the baseline compliance monitoring report. Is this continuous or just for a specified time period? [19] [25]

RESPONSE 200: Modeling is not appropriate for ambient in-stream monitoring as required under Part IV.G.9. However, the Department encourages the use of previously collected data under a Department approved QAPP. For example, permittees may have completed portions

of this monitoring under the MGP. Permittees can evaluate what was submitted and build upon the existing information as necessary in order to meet the requirements of Part IV.G.9.a of this permit.

For follow-up monitoring, during and after implementation of the LTCP, the permittee should conduct actual sampling/measurements to verify the accuracy of the model predictions for their circumstances. Representative CSO outfalls may be selected rather than sampling all outfalls within the hydraulically connected system. Details regarding technical issues such as the sampling time frames are best left to the Work Plan.

No changes have been made to the Final permit(s) as a result of this comment.

201. COMMENT: The permits issued to CCMUA, the City of Gloucester and the City of Camden require the permittees to develop an approvable LTCP within three years; however, the National CSO Policy says plans should be developed within two years absent unusual circumstances. Yet, the Department has explained that the unusual overlapping jurisdiction between CCMUA and Camden City and Gloucester makes the circumstances of these permits unusual. Given that the permittees have already conducted extensive studies under the 2004 permit, we urge the Department and the permittees to move on these plans as quickly as possible. [3]

202. COMMENT: The permit requires submittal of an LTCP within three years.. The National CSO Policy says that LTCP's should be submitted within two years, outside of unusual circumstances. We should have had phase 2 permits about a decade ago, so the time for leeway is somewhat passed. It is unclear in the permit what makes Gloucester, CCMUA, and Camden unusually complex as far as CSO permitting is concerned since CSO permits everywhere are complex. It may not be fair to say that Camden County's CSO situation is more complex than Philadelphia's or New York's. [1]

203. COMMENT: It appears that the Department has given three years, at least to both Perth Amboy and to Elizabeth, for the generation of the approvable LTCP. This is due in part to a complicated regulatory situation when you have the communities and the STP's interacting. This time frame seems a little bit longer than has been contemplated under the National CSO Policy. It is recommended that the Department try to keep the timelines to the most reasonable length that can be achieved. [13]

RESPONSE 201-203: As described in **RESPONSE 170-174** of Section B of this Response to Comments document, the Department has modified the due dates for the LTCP to EDP +36 months (for separate LTCPs), and EDP +59 months (for single, coordinated LTCPs). The Department maintains that development of an LTCP for CSSs in New Jersey is inherently complex given the numerous hydraulically connected systems, multiple permittees, multiple jurisdictions and the significant requirements that make up the LTCP. The Department maintains that additional time to develop an LTCP will lead to a more complete and thorough plan. Please refer to the CSO Submittal Summary for modified dates.

With regard to the comment comparing Camden County with Philadelphia and New York City, it is important to recognize that while Philadelphia and New York City's CSS are under single governing entities, Camden County as well as the majority of New Jersey's combined communities represent an integration of municipalities, sewerage entities and other fractured ownership entities. This permit represents a unique challenge because it requires New Jersey permittees to address all nine LTCP elements.

No additional changes have been made to the Final permit(s) as a result of this comment.

204. COMMENT: We like that you shortened the timeframes located at Part IV.D.3.c and Part IV.D.3.d in the PVSC permit, relative to the timeframes located at Part IV.D.3.b and Part IV.D.3.c in the CCMUA permit. If PVSC can develop and submit the CMP Work Plan in 3 months, and the baseline CMP Report in 12 months, so, probably, can CCMUA. We encourage the Department to adopt the absolutely shortest timeframes possible in all of the permits. [43]

RESPONSE 204: The Department erroneously stated in the permits issued to CCMUA, the City of Camden and the City of Gloucester that the CMP Report and data was due "on or before EDP +2 years." It was the Department's intent to include a schedule of EDP +12 months consistent with the other Draft NJPDES CSO permits. The compliance date for the CMP Report and data is set at EDP +24 months (for separate LTCPs), and EDP +36 months (for single, coordinated LTCPs) for all Final NJPDES CSO permits as described in **RESPONSE 170-174** of Section B of this Response to Comments document.

No additional changes have been made to the Final permit(s) as a result of this comment.

205. COMMENT: Regarding Part IV.D.3.b, NBMUA and the Town of Guttenberg intend to work together to develop a system-wide LTCP. Similarly, the City of Paterson and NBMUA intend to work together with other permittees in the PVSC system to develop a system-wide LTCP. As a result, the LTCP deadlines should be revised where these recommended deadlines are the result of initial meetings of entities within the system. The suggested deadlines represent an ambitious but achievable schedule to develop a comprehensive system-wide LTCP.

- **System Characterization Work Plan -** Three months is not nearly enough time to develop a system characterization work plan for the entire CSO system tributary to PVSC and the associated receiving waters. Much of this work has not been done in compliance with any previous permits. The CSO permittee groups will need to formalize their group, agree on cost-sharing mechanisms, and secure professional services before any work commences. Working as a group means that additional time will be needed for the assembly of existing information and the review of draft submissions where the assembly of information and formalization of the group is already underway. The time period for work plan submittal should be increased to EDP +9 months for a draft work plan, and EDP +12 months for the final work plan, which allows 30 days for the Department to provide comments and 60 days to finalize the work plan in response to the comments.

The permit needs to specify that the Department's comments will be received 30 days after the draft work plan is submitted, as subsequent deadlines depend on it.

- **System Characterization Report, the Public Participation Process, and Consideration of Sensitive Areas -** Twelve months is not even enough time to complete the reports required under Parts IV G.1, G.2, and G.3. The work plan alone will take 12 months to prepare. The characterization will include a thorough review of the entire collection system in order to identify the frequency and characteristics of CSOs in response to precipitation events, as well as to characterize the water quality impacts that result from CSOs. Much of this work has not been done in compliance with any previous permits. The impacts from a range of precipitation events will need to be captured and evaluated. A single-year sampling program cannot be expected to provide the information needed to characterize the system. Working as a group means that additional time will need to be allotted for assembly of existing information and review of draft submissions. In addition, NBMUA intends to work with the Harbor Discharger Group regarding receiving water characterization, since the Hudson River is also the receiving water for many CSSs within the PVSC system. At least 24 months will be required after the Department's approval of the work plan to complete the system characterization study. Therefore, the time period for report submittal should be 24 months after the Department's approval of the System Characterization Work Plan, or at least EDP +36 months.

- **Development and Evaluation of Alternatives Report -** Twenty-four months is not enough time to complete the alternatives evaluation report under Parts IV G.2, G.3, G.4, G.5, and G.9. Much of this work has not been done in compliance with any previous permits. While some of the development and evaluation of alternatives can occur in parallel with the system characterization, much of the work cannot be finalized until after the system characterization is completed at EDP +36 months at the earliest. Working as a group means that additional time will need to be allotted for assembly of existing information and review of draft submissions. In addition, the requirements for public participation (Part IV.G.2) are inconsistent with the proposed schedule, as inadequate time is allotted to implement the public participation requirements. At least 18 months will be required after the completion of the system characterization, in order to develop and analyze alternatives and prepare a report; therefore, the time period for report submittal should be increased to EDP +54 months.

- **Selection and Implementation of Alternatives Report –** Thirty-six months is not enough time to perform the tasks under Parts IV G.2, G.6, G.7, G.8, and G.9 or to complete the LTCP Report. Much of this work has not been done in compliance with any previous permits. Working as a group means that additional time will need to be allotted for assembly of existing information and review of draft submissions. At a minimum, six months will be required after the development and evaluation of alternatives in order to select alternatives and prepare a report; therefore, the time period for report submittal should be increased to EDP +59 months. [33] [34] [40]

206. COMMENT: The Draft permit includes submittal deadlines that are unrealistic based upon the work required to implement the studies and/or reviews. It is requested that the Department revise the submittal deadlines for PVSC and the municipal permittees within its district in accordance with the table below. [42]

CSO Permit Schedules for PVSC Communities	**Revised Submittal Dates**
	In EDP + Months
LTCP Schedule	
• System Characterization Work Plan	Draft 9 / Final 12
• System Characterization Report, PPP, and Sensitive Areas	36
• Development and Evaluation of Alternatives Report	54
• Months Selection and Implementation of Alternatives	59
Compliance Monitoring Schedule	
• CMP Work Plan	Draft 9 / Final 12
• CMP Report	36
Other Permit Deadlines	
• GPS coordinates	EDP+4
• Submit sewer mapping	
• Begin CSO Monitoring	EDP+12
• Correction of deficiencies	2

207. COMMENT: Regarding Part IV.D.3.b. i, ii, iii, and iv, the City of Elizabeth is requesting several extensions. Because of the need to obtain information from hydraulically connected municipalities in a timely manner, the City requests that the timeframe for the submission of an approvable System Characterization Work Plan be increased from EDP +3 months to EDP +12 months. Correspondingly, the timeframe for the submission of an approvable System Characterization Report should be extended from EDP +12 months to EDP +24 months to allow for collection of E coli data in the portion of the Elizabeth River classified as FW2-NT. Accordingly, the City is requesting an extension of the timeframe for the submission of an approvable Development and Evaluation of Alternatives Report from EDP +24 to EDP +36 months, and the extension of the timeframe for the submission of an approvable Selection and Implementation of Alternatives Report from EDP +36 months to EDP +48 months. [12]

208. COMMENT: Part IV.D 3.b., D.3.c, and D.3.d. state that the LTCP deliverables schedule is based on a three year overall schedule. If the permittees hydraulically connected to PVSC agree to develop a cooperative LTCP and request a time extension as described in the Fact Sheet, this condition only offers the opportunity to request a time extension which is always the permittees right. Is there any assurance that a time extension will be granted to develop a more complex cooperative LTCP? How will any time extension be granted? Will revised dates be granted for each milestone and deliverable to allow for time for the documents from each permittee to be integrated? Will the time extension require a permit modification? [28] [31]

209. COMMENT: The schedule for completion of all of the LTCP tasks in Part IV.D.3.b is too aggressive and does not consider the need to collect/conduct additional wet weather sampling within an established time frame that may or may not produce adequate wet weather events. This section should be modified to read: "Unless otherwise approved by the Department the permittee shall develop**…."** [26]

RESPONSE 205-209: The Department has revised a number of the submittal dates as described in the CSO Submittal Summary where these revised dates are included in the Final permits. This includes extensions to the LTCP due date to EDP +59 months for those hydraulically connected permittees who have committed to a single, coordinated LTCP. For any permittees who wish to commit to a single, coordinated LTCP and have not yet done so, the Department will consider extending the final LTCP submittal date to 59 months for those permittees who submit complete requests up until EDP +3 months.

While the Department has not extended all of the due dates to the suggested dates provided in these comments, many of the same requirements have indeed been extended. In addition, regarding **COMMENT 209**, the Department has incorporated changes to Part IV.D.3.d to allow the Department to extend the compliance date for the CMP Report through a permit modification which could account for delays in sampling based on weather events. Please refer to **RESPONSE 55-62** in Section B of the Response to Comments document for additional information.

While compliance dates have been modified as per the CSO Submittal Summary, no additional changes have been made to the Final permit(s) as a result of these comments.

210. COMMENT: Part IV.D.3.b requires JMEUC to submit "an approvable LTCP that will include the elements contained in Section G." This section then proceeds to supply additional details for various "work plans" where the selected LTCP approach must be submitted within 36 months from the permit issuance date. It is not apparent how JMEUC could possibly submit an "approvable LTCP" or the work plans since it does not control the CSO discharges or the collection system and cannot implement improvements within the collection system. This provision should be deleted as it requires actions beyond the legal authority of JMEUC. [9]

211. COMMENT: Part IV.D.3.b describes the schedule for the LTCP components. The permittee does not own or operate a CSS, regulators, or CSO outfalls. Therefore, the only parts of an LTCP that are applicable to the permittee are the requirements maximize wet weather flows treated at the STP and Public Participation.

The following requirements do not apply and should be revised as follows: IV.D.3.b.i – delete the System Characterization Work Plan; IV.D.3.b.ii – delete references to "G.1, and G.3, "the System Characterization Report" as well as "and Consideration of Sensitive Areas of the LTCP"; IV.D.3.b.iii - delete" "through G.5." and substitute "G.4.e.iii and G.4.e.vii., G.5 and G.7."; and IV.D.3.c and IV.D.3.d – delete these requirements for the CMP Work Plan and the CMP Report. [15]

212. COMMENT: Regarding Part IV.D.3.b.ii, the system characterization and consideration of sensitive areas as detailed in Section G are applicable only to communities with CSO discharges and does not really pertain to the BCUA since the BCUA has no CSO outfalls. Please remove requirements that do not pertain to BCUA from the permit.

Part IV.D.3.c requires, in accordance with Section G.9, the submission of an approvable baseline CMP on or before EDP +3 months. Section D.3.d requires the completion of a baseline CMP Report and data on or before EDP +12 months. BCUA does not own nor operate any CSO Outfalls and therefore these requirements should be eliminated from their permit. Therefore, this section should be modified to read: "Unless otherwise approved by the Department the permittee shall develop an approved LTCP that **… ."** [21]

213. COMMENT: PVSC requests the following changes since the permittee does not own or operate CSO outfalls and therefore these requirements do not apply: IV.G.3.b.ii - "G.3" and *Consideration of Sensitive Areas* should be deleted; IV.G.3.b.ii - "Sections G.2. through G.5." and "G.9." should be revised to "G.2., G.4., G.5 and G.9."; IV.G.3.b.iii – "Sections G.2. and G.6 through G.9." should be revised to "Sections G.2., G.7. and G.8."; and IV.D.3.c and IV.D.3.d should be deleted. [42]

RESPONSE 210-213: These comments were all made on CSO permits issued to STPs who do not own/operate CSO outfalls. Part IV.D.3.b refers to the steps to follow when developing the LTCP, whereas Parts IV.D.3.c and d refers to the CMP Work Plan and Report, which is a component of the LTCP (Part IV.G.9). The Department does not agree that this section should be deleted from the permits. While the Department agrees that some STP permittees (e.g., JMEUC, BCUA, MCUA and PVSC) may not currently own/operate separate or combined sewers, all of the LTCP requirements have been included in all of the CSO permittee permits, whether the permittee currently owns/operates any separate or combined sewers or if they only own/operate the STP that receives flows from a CSS. Please refer to Part IV.G.10, as well as above to **RESPONSE 26-42** of Section A of the Response to Comments document for additional information.

No changes have been made to the Final permit(s) as a result of these comments.

214. COMMENT: What does "approvable" mean in Part IV.D.3.b.i, Part IV.D.3.b.iii, Part IV.D.3.b.iv, Part IV.D.3.c and Part IV.D.3.d? If the initial submission is not approved by the Department, is it a permit violation? [35]

215. COMMENT: PVSC requests that the Department delete the word "approvable" from Part IV.D.3.b.i, Part IV.D.3.b.iii and Part IV.D.3.b.iv. The permittee does not have authority to approve work plans or reports so it can not assure compliance with this requirement. [42]

216. COMMENT: Part IV.D.3.c requires submission of an "approvable" baseline CMP on or before EDP +3 months. We cannot submit "approvable" plans when such actions require review time and feedback from the Department. [25]

RESPONSE 214-216: The Department used the phrase "the permittee shall submit an approvable" to preface the requirements for the System Characterization Work Plan (Part IV.D.2.b.i); Development and Evaluation of Alternatives Report (Part IV.D.2.b.iii); the Selection and Implementation of Alternatives Report (Part IV.D.2.b.iv); CMP Work Plan (Part IV.D.3.c) and the CMP Report (Part IV.D.3.d). The Department recognizes that the permittee does not have the authority to approve the work plans or any reports. However, the permittee does have the ability to submit complete work plans and reports as outlined in the permit that can be approved by the Department. For example, the identification of an "approvable" System Characterization Work Plan means a work plan that addresses each and every aspect of the elements contained within Section G.1 of the permit.

No changes have been made to the Final permit(s) as a result of these comments.

217. COMMENT: How long will the Department take to approve the CMP Work Plan, which will serve as a guide for monitoring? Will the permittee be expected to start the work without an approved work plan? Does the Department have the resources to evaluate the many work plans that will be submitted by all of the CSO permittees in the State? When will the Department approve the Development and Evaluation of Alternatives Report as it is assumed that it will be the guide for the selection and implementation of the LTCP? If the initial submissions are not approved by the Department, is it a permit violation? [35]

218. COMMENT: How long will the Department take to approve the work plan? Will the Permittee be expected to start the work without an approved work plan? Does the Department have the resources to evaluate the many work plans that will be submitted by all of the CSO permittees in the State? In the past, it has taken years for work plans to be approved by the State. [6] [15] [20] [32] [40] [42] [44]

219. COMMENT: Will the permittee be expected to start the work without an approved work plan? Does the Department have the resources to evaluate the many work plans that will be submitted almost simultaneously by all of the CSO permittees in the State? Will the State extend the deadline for completing the CMP in the event the work plan is not approved by the Department in a timely fashion? [29]

220. COMMENT: Regarding Part IV.D.3.c, implementation of the CMP Work Plan will be contingent upon the Department's approval of the work plan. How long will the Department require for CMP Work Plan review and approval? [28] [31]

221. COMMENT: The Department should establish its own timeframe to approve the CMP Work Plan. [40]

RESPONSE 217-221: The Department will be reviewing work plans and other reports as itemized in Part IV.D.3.b, c and d as they are submitted. The Department is aware of the sequential nature of the tasks and agrees that timely review of the submissions is integral to the success of the NJPDES CSO program. As described in **RESPONSE 64-70** in Section B of the Response to Comments document, the Department has modified Part IV.D.1.a to allow time for the permittee to respond to technical deficiencies which is particularly important for

the work plan process. Additionally, the Department has modified several of the interim compliance dates and is allowing a 59 month LTCP for those hydraulically connected permittees who wish to submit a single, coordinated LTCP.

The Department also recognizes the importance of permittee's complying with the submittal deadlines contained within their permits. As such, the Department will work towards reviewing and approving the work plan as quickly as possible. If compliance with a deadline cannot be met solely due to delays caused by the Department, the permittee may request an extension of the deadline in writing to the Department. Please refer to **RESPONSE 55-62** in Section B of the Response to Comments document. However, please note that no permittee shall proceed with any ambient monitoring without having an approved work plan or specific written approval by the Department to proceed with portions of the work plan.

No additional changes have been made to the Final permit(s) as a result of these comments.

222. COMMENT: Regarding Part IV.D.4.a, PVSC agrees that progress reporting is a tool that will keep permittees on track for completing their required tasks. Quarterly reporting on long term studies is unduly burdensome and likely will not provide meaningful information to the Department or the interested public. Quarterly reporting will burden the Department with reports that will need to be reviewed, and unnecessary enforcement actions resulting from late reporting. Therefore, PVSC requests that the Department revise the quarterly reporting requirement to once annually, with the first report due EDP +12 months. [42]

223. COMMENT: The work required by this permit is voluminous, complex, and lengthy. Progress will be measured when reports are completed, submitted and reviewed by the Department, which will occur on an annual basis. A report that is required to be submitted quarterly for such a long term project will produce a document that will only have entries of "nothing further to report." Therefore, delete "every quarter" and replace it with "annually." [35] [42] [44]

224. COMMENT: Part IV.D.4.a requires submission of quarterly CSO Progress Reports 25 days after the end of every quarter. Such frequent reporting is overly burdensome where semi-annual reporting would be more reasonable. [25]

225. COMMENT: Part IV.D.4.a requires JMEUC to submit quarterly CSO Progress Reports. First, the reporting should be from the City of Elizabeth. Second, such frequent reporting is overly burdensome; where annual reporting for the City of Elizabeth would seem sufficient. [9]

226. COMMENT: As per Part IV.D.4, progress report verifications will require coordination with the Woodcliff STP. [29]

227. COMMENT: It is unclear what can be reported on the first day of a calendar quarter. We propose alternate language that is typically seen in similar permits: "Beginning within 30 days of the close of the first full calendar quarter following EDP, and within 30 days of the close of each subsequent calendar quarter." [6] [42]

228. COMMENT: Part IV.D.4 describes progress reports and requires reporting quarterly. If a cooperative LTCP is developed for hydraulically connected permittees, will a single quarterly report covering all permittees be acceptable? [28] [31]

RESPONSE 222-228: Part IV.D.4.a requires that

"a. The permittee shall submit Progress Reports: within twenty-five (25) days after the end of every quarter beginning from the effective date of the permit (EDP)."

This permit condition has been applied to all NJPDES CSO permittees including both municipalities and STPs. The Department maintains that this condition is clear as written and does not need to be modified. This condition is intended so that the permittee can report progress from the previous calendar quarter. To offer an example, given that the Final permit becomes effective on July 1, 2015, the calendar quarter runs from July 1 to September 30. On October 25, 2015, the permittee shall report on any progress that took place from July 1, to September 30. Note that the progress reports are due on the same day as MRFs.

Progress reports are critical given the breadth of the NJPDES CSO permit requirements, as well as the proactive schedule for completion of the LTCPs. The Department maintains that this permit condition is integral to keeping both the Department informed of the permittees' progress, as well as to ensure that members of the public can track progress, if they so choose, as these reports will be publicly available. The Department disagrees that a quarterly frequency is overly burdensome. The Department also does not agree that there will be many instances when that permittees will have nothing to report.

A single progress report cannot be utilized for a cooperative LTCP for hydraulically connected permittees. The Department will accept similar language within the reports, where appropriate, but maintains that it must receive a single report from each permittee, submitted on their own letterhead, in order to satisfy the permit conditions.

No changes have been made to the Final permit(s) as a result of these comments.

229. COMMENT: The statement in Part IV.D.4.b.ii that the progress report shall include all required information is ambiguous and overreaching. The Department should provide specifics as to the types of information it is seeking instead of categorizing them as "all." Part IV.D.4.b.ii should be modified to read: "The Progress Report shall include a summary of permit compliance deadlines and progress to date for each, and measures implemented by the permittee to comply with the NMCs. Upon NJDEP approval of the LTCP the Progress Report shall provide, and update**,** a prioritized schedule for additional measures to be implemented... ." [21] [25]

230. COMMENT: Regarding Part IV.D.4.b.ii, the reporting requirements for "additional CSO control measures…effectiveness of CSO controls.." seem to be referencing future work that will be undertaken primarily as part of the LTCP and not necessarily under this permit. The CSO controls implemented to date are primarily for S/F control and the "effectiveness" of

these controls shall be reported in the DMR, which is submitted on a monthly basis. Accordingly, it appears that, while there may be a need to provide this information for other future projects, the inclusion of the requirement at the present is premature.

At a minimum, Part D.4.b.ii should be modified to read: "The Progress Report shall include a summary of permit compliance deadlines and their progress to date and CSO control measures implemented by the permittee to comply with the NMCs. Upon NJDEP's approval of the LTCP, the Progress Report shall provide a prioritized schedule for additional CSO control measures to be implemented, and the effectiveness …" [19] [25]

231. COMMENT: Part IV.D.4.b.ii should be modified to read: "The Progress Report shall include a summary of permit compliance deadlines and progress to date for each, and CSO control measures implemented by the permittee to comply with the NMCs. Upon NJDEP approval of the LTCP the Progress Report shall provide, and update, a prioritized schedule for additional CSO control measures to be implemented…" [21] [26]

232. COMMENT: "A summary of all required information" in Part IV.D.4.b.ii should be deleted. The only information that should be required is that which is listed in the remainder of this condition and subsequent conditions. As progress reports are required quarterly, it should be left to the discretion of the permittee as to whether a summary is necessary, and would depend on the amount of information that needs to be conveyed in a given quarter. [33] [34]

233. COMMENT: The reporting requirements for "additional CSO control measures …effectiveness of CSO controls.." do not pertain to the BCUA and should be deleted from the permit. [21]

234. COMMENT: What additional "CSO control measures" beyond the NMCs, other than those in the LTCP, are required? [35]

235. COMMENT: In Part IV.D.4.b.ii, insert "that are applicable to this Permittee" between "information," and ", CSO control measures." [15] [20] [32] [40] [42] [44]

RESPONSE 229-235: The Department agrees that Part IV.D.4.b.ii should be revised to ensure that it is clear that the progress report pertains to the permittee. Because Part IV.D.4.b has changed in format, where it now extends into Part IV.D.4.b.i through iv, this entire condition is revised as follows:

"b. The Progress Reports shall be prepared in accordance with the following requirements:

i. The Progress Reports shall follow the outline structure of the permit requirements in Section F and G.

"ii. The Progress Reports shall include, at a minimum, a summary of all permit compliance deadlines, their progress to date and ~~required information,~~ CSO control measures implemented by the permittee to comply with the NMCs. ~~;~~ The progress reports shall also include a prioritized schedule for additional CSO control measures to be

implemented, and the effectiveness of the implemented CSO control measures, pursuant to this permit for the previous calendar quarter. ~~The first Progress Report shall include a summary of all CSO control measures implemented to date and the effectiveness of those controls.~~

iii. The first Progress Report shall include a summary of all CSO control measures implemented to date and the effectiveness of those control measures.

The Department maintains that the revised description of the progress report summary in Part IV.D.4.b is now more clear. The Department has described the expected content of the progress reports at Part IV.D.4.b.i which states "The Progress Reports shall follow the outline structure of the permit requirements in Sections F. and G." The Department recognizes that this could include a summary of work that has already been conducted as well as work that will be conducted in the future. Because the Department is requiring the submission of progress reports on a quarterly basis, the Department recognizes that there will be some components that do not change in the short term. Nonetheless, the Department maintains that a frequency of quarterly is appropriate given the proactive timeframes for the LTCPs.

This change affects Part IV.D.4.b.ii and Part IV.D.4.b.iii of the Final permits.

236. COMMENT: Regarding Part IV.D.4.b.ii, the Department should identify what criteria is to be applied to determine the "effectiveness of the implemented CSO control measures." The "effectiveness" cannot be measured on such a short term basis (quarterly). Reporting frequency should either be changed to "annually", or this section should be eliminated entirely [15] [20] [32] [35] [40] [42] [44]

237. COMMENT: On what basis, and over what time frame, is the permittee expected to determine "effectiveness of the implemented CSO control measures?" This phrase should be defined (and the permit re-proposed), or the phrase should be eliminated, as the permittee has no means of providing the requested information. [33] [34]

238. COMMENT: Part IV.D.4.b.ii states that the quarterly progress reports are to assess CSO control effectiveness. How is this to be measured during the development of the LTCP? Effectiveness cannot be determined until the baseline is defined; and any assessment of effectiveness over a short timeframe will be influenced by other factors such as climate, stormwater, point source discharge performance and others. [28] [31]

239. COMMENT: How will/should improvements to water quality be measured after satisfaction of the NMCs? For those aspects of the NMCs that have been previously completed, if baseline conditions were not measured prior to completion, how can effectiveness be determined? If implementation of the LTCP is to begin after the selected alternative is approved, and implementation may take many years, what effectiveness does the Department feel will be measureable every quarter, or even annually, during the first few years of the program?

If progress reports are required every quarter after EDP, it is doubtful that any effectiveness of the CSO control measures will be evident. Further, the effectiveness may depend on the nature of the particular control measure selected/implemented. The requirement to submit a report on effectiveness should either be deleted or modified to say "where appropriate." [35]

RESPONSE 236-239: The Department agrees with **COMMENT 238** above, specifically that the permit could be clarified regarding the determination of the "effectiveness" of the CSO control measures and maintains that the revisions described in **RESPONSE 229-235** of Section B of the Response to Comments document should serve to clarify the Department's intent. It is correct that certain assessments can not be completed until after the baseline monitoring report and subsequent reports in future years are completed. However, there are other CSO effectiveness determinations that can be made and documented in the progress reports. For example, if pumps were installed on CSO outfall pipes to alleviate flooding, the progress report should document such installation as well as any updates on the status of the flooding in the area.

Inclusion of the word "effectiveness" is simply to ensure that the permittee reports on progress regarding implementation of certain measures as described in **RESPONSE 222-228** of Section B of the Response to Comments document. The Department acknowledges that a decision on the LTCP is made by the Department.

No changes have been made to the Final permit(s) as a result of these comments.

240. COMMENT: Regarding Part IV.D.4.b.iii, verification that the O&M Manual and associated documents have been updated in accordance with the permit and amended annually, as needed, should be provided annually in the progress report rather than quarterly. It does not make sense to report quarterly on something that requires only annual updates. [33] [34]

241. COMMENT: N.J.A.C. 7:14A-6.12(d) states "The operation and maintenance manual shall be amended whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures." Therefore, the phrase in Part IV.D.4.b.iii "Each Progress Report must include a verification that the Operation and Maintenance manual...and amended annually as necessary." should be amended. Delete "annually" and replace it with "whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operation and maintenance procedures." [35] [42] [44]

242. COMMENT: Part IV.D.4.b.iii requires that each progress report include a verification of the O&M Manual. Will the Department be approving these submissions? [25]

243. COMMENT: Verification of annual updates of the O&M Manual, etc. should be reported annually. [15] [20] [40]

RESPONSE 240-243: The Department has revised this permit condition based on the format changes described in **RESPONSE 229-235** of Section B of the Response to Comments document. Part IV.D.4.b.iv (formerly Part IV.D.4.b.iii) requires that:

"iv~~iii.~~ 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."

This requirement may be met by referencing the last date the O&M Manual was updated on each quarterly progress report.

This change affects Part IV.D.4.b.iv of the Final permits.

244. COMMENT: In Part IV.D.4.iv, delete the phrase "contain a detailed discussion of, and" from this condition. The phrase "detailed discussion" is vague, and amounts to busywork. The progress report should document compliance with the NMCs. [33] [34]

245. COMMENT: In Part IV.D.4.iv, delete the phrase "and the manner in which all owners/operators of the hydraulically connected collection system participated in the development of the LTCP." Each permittee should report, on its own, the requirements under the permit, whether those requirements are satisfied independently or with a CSO group. [33] [34]

246. COMMENT: Each permittee should only report on its own requirements under the permit. Therefore, in Part IV.D.4.b.iv, delete the phrase "and the manner in which…" [15] [20] [32] [40] [42] [44]

RESPONSE 244-246: Part IV.D.4.b.v (formerly Part IV.D.4.b.iv) is stated as follows:

"~~i~~v. Each Progress Report shall contain a detailed discussion of, and document compliance with, the continued implementation of the NMCs and the manner in which all owners/operators of the hydraulically connected collection system participated in the development of the LTCP, including information regarding the development and status of the telephone hot line/website pursuant to Section F.8."

The Department maintains that inclusion of the phrase "contain a detailed discussion of, and" is appropriate. The progress report should not simply be a list of tasks, but rather a summary of progress or information that has been gathered during the reporting quarter. While the Department recognizes that the progress report shall report on the permittee's own progress, it is likely that the progress report may contain details on progress from other hydraulically connected entities given the interrelated nature of the LTCP components. The Department encourages the reporting of such information as effective communication will lead to a more meaningful LTCP process.

The Department does not agree with the commenter's assertion that the intention of the progress report is to simply document compliance with the NMCs. The purpose of the progress report is to document compliance with the continued implementation of the NMCs, including public notification requirements, as well as the progress relating to the development of the LTCP.

With the exception of renumbering, no changes have been made to the Final permit(s) as a result of these comments.

247. COMMENT: Regarding Part IV.D.4.v, each permittee should only report on their own requirements under the permit. Therefore, replace the phrase "all owners/operators of the hydraulically connected collection system" with "the Permittee." [35]

248. COMMENT: Part IV.D.4.b.v must be clarified to indicate that JMEUC is only responsible for implementing LTCP measures applicable to the JMEUC facility (e.g., expansion as appropriate to accommodate increased peak flows). [9]

249. COMMENT: Part IV.D.4.b.v should limit the requirement of implementation of CSO control measures to only the permittee's control measures. The language should be changed as follows: "Upon Department approval of the LTCP, the permittee shall begin implementation of their CSO control measures in accordance with the schedule approved in the approved LTCP." [28] [31]

250. COMMENT: In Part IV.D.4.b.v, replace the phrase "implementation of the CSO control measures" with "implementation of this permittee's CSO control measures." This will serve to clarify that NBMUA is only responsible for implementation of its own CSO controls. [33] [34]

251. COMMENT: Delete the word "the" between "implementation of" and "CSO" and replace it with "this Permittee's" [15] [20] [32] [40] [42] [44]

RESPONSE 247-251: The Department agrees that Part IV.D.4.b.vi (formerly Part IV.D.4.b.v) could be clarified, and is revised as follows:

"vi. Upon Departmental approval of the LTCP, the permittee shall begin implementation of the permittee's CSO control measures in accordance with the schedule in the approved LTCP."

This change affects Part IV.D.4.b.vi of the Final permits.

252. COMMENT: PVSC requests that IV.D.4.b.v be deleted from its Individual NJPDES permit as PVSC does not own or operate any CSOs. [42]

RESPONSE 252: The Department maintains that because PVSC is required to submit an LTCP, Part IV.D.4.b.vi (formerly Part IV.D.4.b.v) applies and should not be deleted. Please refer to **RESPONSE 26-42** of Section A of the Response to Comments document.

No changes to the Final permit(s) have been made as a result of this comment.

Part IV, Combined Sewer Management, Part E, Facility Management

253. COMMENT: Part IV.E.1.a requires the permittee to discharge at the locations specified in the permit. Under emergency conditions (e.g., extreme flooding due to hurricanes such as Hurricane Sandy), discharges may occur at other locations, and the State's emergency discharge provisions should cover these emergency conditions. [25]

RESPONSE 253: The Department agrees that there may be emergency circumstances where discharges will occur not at the locations specified in the permit. However, these circumstances are handled on a case-by-case basis outside the NJPDES permit in accordance with the provisions of N.J.A.C. 7:14A-6.10.

No changes have been made to the Final permit(s) as a result of this comment.

254. COMMENT: Part IV.E.1 acknowledges that "Since the permittee does not own/operate any CSO outfalls, there are no CSO discharge requirements at this time." We agree. JMEUC will never "own or operate CSO outfalls" and therefore the requirements of the remaining sections need to be revised to reflect that fact. [9]

RESPONSE 254: As described in **RESPONSE 19-22**, **RESPONSE 38**, and **RESPONSE 259** of Section B of this Response to Comments document, the Department has modified Part IV.A.1, C.1 and E.1 in the final NJPDES CSO permits for the four STPs (JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028), MCUA (NJ0020141) and PVSC (NJ0021016)) to clarify that these STPs do not own/operate CSO outfalls. It is not clear as to which "remaining sections" the commenter is referring to in this comment under Part IV.E.1.

No additional changes have been made to the Final permit(s) as a result of this comment.

255. COMMENT: Part IV.E.1.c states "The permittee's discharge shall not produce objectionable color or odor in the receiving stream." However, the phrase "shall not produce objectionable color or odor" refers only to foam as per N.J.A.C. 7:14A-12.6(a)(3).

N.J.A.C. 7:14A-12.1(a) "Federal and State effluent standards which may be incorporated into a permit" states in (b) 2.ii "Any discharge from a combined sewer overflow shall be subject to one or more requirements of this subchapter when the Fact Sheet for the Draft permit for such discharge provides the basis for the inclusion of such requirement(s)." No such basis was contained in the Draft permit Fact Sheet.

The criteria for color is contained at N.J.A.C. 7:9B-1.14(d) General Surface Water Quality Criteria. It provides that for "[f]loating, colloidal, color and settleable solids; petroleum hydrocarbons and other oils and grease" the criteria should be "None noticeable in the water or depositing along the shore or on the aquatic substrata in quantities detrimental to the natural biota. None which would render the waters unsuitable for the designated uses."

Therefore, delete this sentence and replace it with "The Permittee's discharge shall be in compliance with the requirements of N.J.A.C. 7:9B-1.14(d) 3.i for color." [20] [32] [35] [40] [42] [44]

RESPONSE 255: The Department agrees that the SWQS at N.J.A.C. 7:9B-1.14(d) establishes criteria for floating, colloidal color and settleable solids; petroleum hydrocarbons and other oils and grease. The Department has imposed the requirement of Part IV.E.1.c in order to ensure that discharges from CSOs do not detract from the aesthetic appearance of the receiving water body and do not create a nuisance by visual and odor characteristics or detrimental effects on the aquatic biota. Imposition of this requirement is authorized consistent with the provisions of N.J.A.C. 7:9B-1 as well as N.J.A.C. 7:14A-6.3(a). Further, consistent with the requirement of Part II.A.1.a.i, the permittee is required to comply with the SWQS, including the provisions at N.J.A.C. 7:9B-1.14(d)3.1 for "Floating, colloidal, color and settleable solids; petroleum hydrocarbons and other oils and grease." The Department maintains that inclusion of Part IV.E.1.c is appropriate in Part IV of the Final CSM permit, and believes that this permit condition has been incorporated consistent with the requirements of both the SWQS and the NJPDES Regulations (N.J.A.C. 7:14A).

Section 3 of the Draft permit Fact Sheet, "Combined Sewer Overflow Discharge Description," describes the effects and hazards of CSOs and the rationale for imposing these requirements. Section 8 of the Draft permit Fact Sheet, "Contents of the Administrative Record, Rules and Regulations," describes the regulatory basis including N.J.A.C. 7:9B-1 SWQS.

No changes have been made to the Final permit(s) as a result of this comment.

256. COMMENT: Regarding Part IV.E.2.a, not all CSO outfalls are in the Interstate Environmental Commission (IEC) District, so this sentence should not apply to those CSO outfalls outside of the IEC District. [35]

257. COMMENT: Remove Part IV.E.2.a as our CSO outfalls do not discharge to waters regulated by the IEC. [33] [40]

258. COMMENT: Part IV.E.2.a is only applicable to those municipalities that are in the IEC district. Therefore, add "if in the IEC district" after "Water Quality Regulations." [42] [44]

RESPONSE 256-258: The Department recognizes that there are CSO discharges authorized in the NJPDES CSO permits that may not be within the IEC district. There may even be instances within one NJPDES permit where some outfalls are within the IEC district and other outfalls are not within the IEC district. As a result, the Department agrees that this language should be modified as follows:

"2. Interstate Environmental Commission (IEC)

"a. The permittee shall comply with the Interstate Environmental Commission's (IEC) "Water Quality Regulations~~.~~", where applicable."

Note that there are NJPDES CSO permits issued to STPs where the IEC conditions apply to the STP portion of the NJPDES CSO permit which is duly noted in the Category A (Sanitary

Wastewater) component of Part IV. However, the above referenced change is specific to the CSM section of Part IV.

This change affects Part IV.E.2.b in those Final permits that contain the IEC permit condition.

259. COMMENT: Part IV.E.2 references the IEC regulations. PVSC requests that Part IV.E.2 be deleted from its Individual NJPDES permit as PVSC does not own or operate any CSO outfalls. PVSC's STP complies with the IEC Water Quality Regulations, but this section is related specifically to CSOs, which PVSC does not own or operate. The Draft permit references the STP's requirement for compliance in Part IV.E.2.a. [42]

RESPONSE 259: The permittee is correct in that Part IV.E.2 as written should not have been included in the NJPDES CSM section of the permit for PVSC (NJ0021016) since it applies to CSO outfalls. The Department modified Part IV.E.1 (CSO Discharge Requirements) and removed Part IV.E.3 (CSO Discharge Monitoring and Reporting Effective Dates) from the PVSC NJPDES CSO Final permit (NJ0021016) as well. The other NJPDES CSO Draft permits issued to STPs who do not own/operate CSO outfalls (JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028), and MCUA (NJ0020141)) contain a different version of Part IV.E.1 that was tailored to reflect that the STP does not own/operate any CSO outfalls. Modified language for Part IV.E for NJ0021016 is as follows:

a. Since the permittee does not own/operate any CSO outfalls, there are no CSO discharge requirements at this time.

This change affects Part IV.E of the Final permit for PVSC (NJ0021016). No changes have been made to any of the other Final permits as a result of these comments.

260. COMMENT: Regarding Part IV.E.2, please provide the specific provisions of the IEC Water Quality Regulations that apply, and how they apply such that the compliance objective may be achieved. This provision should also allow for a schedule of compliance for any new requirements adopted or imposed on NHSA by IEC. [25]

261. COMMENT: Part IV.E.2.a refers to the IEC Water Quality Regulations. Which regulations are applicable to this permit? [20] [32] [35] [42] [44]

RESPONSE 260-261: The IEC (see http://www.iec-nynjct.org/) is a tri-state water and air pollution control agency for New York, New Jersey, and Connecticut. Information regarding IEC's Water Quality Regulations is available at http://www.iec-nynjct.org/wq.regulations.htm. The Department routinely references the IEC Water Quality Regulations in NJPDES/DSW permits within the IEC area. The Department considered the current IEC Water Quality Regulations in establishing specific NJPDES permit conditions and incorporated such conditions where applicable. However, this requirement has been included in the CSO permits, where applicable, to advise the CSO permittees of the need to develop the LTCP in conformance with the IEC Water Quality Regulations.

If, the IEC adopts or imposes new requirements that impact CSO permittees, the Department will then evaluate the appropriateness of allowing a schedule of compliance to meet the new requirements and potentially modify the NJPDES permit in accordance with N.J.A.C. 7:14A-16.4. As described in **RESPONSE 256-258** of Section B of the Response to Comments document, the Department has modified Part IV.E.2.a to indicate that the IEC regulations may not be applicable to certain CSO discharges depending on their location.

No additional changes have been made to the Final permit(s) as a result of these comments.

262. COMMENT: Regarding Part IV.E.3.a which refers to Part IV.A.1.c, currently there are no overflow monitoring meters in place to comply with this condition. Also, there is currently no methodology or plan in place to collect rainfall data and run a model to produce monthly overflow volumes using a model, nor is it known whether a model can be run within the allotted time of 25 days shown in Part III. [20] [32] [35] [40]

263. COMMENT: Regarding Part IV.E.3.a.i, the Department should modify the CSO discharge reporting to commence no later than EDP +12 months. Therefore, insert "except for the requirements of C.1.d which shall start at EDP +12 months" after "permit action." [20] [32] [40]

264. COMMENT: We request that the CSO discharge reporting requirement referenced in Part IV.E.3.a.i not be required before EDP +6 months. Therefore, add "except for the requirements of C.1.d, which shall start at EDP +6 months" at the end of this sentence. [34]

265. COMMENT: Regarding CSO discharge monitoring, there are currently no overflow monitoring meters in place nor is there a methodology or plan in place to collect rainfall data and run a model to produce monthly overflow volumes. The model would need the actual operational data inputs as well as rainfall data, yet the rainfall monitoring stations needed for an accurate modeling of the sewer system are not in place. It would take many months to prepare all the model inputs, run the model, and check the output to determine if there are any problems.

PVSC recommends that the computer derived overflow information be reported annually six months following the conclusion of the modeling year. PVSC recommends that the CSO discharge reporting commence no later than EDP +30 months. This allows 12 months to set up the rainfall monitoring network and computer and reporting methodology; 12 months for the first year of monitoring; and 6 months to compile and QC the operational and rainfall data, run the models, and prepare a report. [42]

RESPONSE 262-265: Please refer to **RESPONSE 137-143** of Section A of the Response to Comments document where the Department has allotted extra time to comply with this MRF condition for monitoring "Duration of Discharge." Also, as noted in this referenced response, permittees who are using a comprehensive model that correlates CSO discharge occurrences with rainfall amounts can develop a chart which correlates rainfall amounts to CSO discharges. For MRF submittal purpose, the permittee may simply determine the rainfall gauge information and use the chart to correlate the associated CSO discharge. This data may be

submitted on the MRF. The Department does not expect the permittee to run continuous models for this purpose.

No changes have been made to the Final permit(s) as a result of these comments.

Section C – NMC #1 through #9

Part IV Combined Sewer Management, Section F, NMC #1. Proper Operation and Regular Program Requirements

1. **COMMENT:** Regarding Part IV.F.1.a, it appears that the permit has inappropriately changed the underlying standard as set forth in N.J.A.C. 7:14A-6.12. That regulation requires a permittee to "maintain in good working order and operate the treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of the discharge permit." Id. at 7:14A-6.12(a). As such, it requires proper operation of the equipment the facility has, and does not require a guarantee that compliance would be achieved by such proper operation especially since compliance cannot be assured at this time (e.g. WQS). In contrast to the regulatory standard, Part IV.F.1.a would require the O&M Manual to "ensure that the treatment works [and] collection system... are operated and maintained in a manner that achieves compliance with all terms and conditions of this permit." A NJPDES permit violation can potentially occur that is not the result of improper O&M, yet the permit condition would automatically deem an O&M violation to have occurred. This must be changed. [25]

RESPONSE 1: The Department agrees with the commenter that having a proper operation and regular maintenance program in conformance with the requirements of Part IV.F.1.a. of the permit does not necessarily guarantee that compliance would be achieved by such proper operation only, and that a NJPDES permit violation can potentially occur that is not the result of improper O&M. Part IV.F.1.a reflects the language and standards of N.J.A.C 7:14A-6.12(a). To avoid confusion, the Department has adopted the language verbatim. The Department has modified the language of Part IV.F.1.a of the permit to read as follows:

> "a. The permittee shall continue to implement and update annually, 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 which are owned/operated by the permittee are operated and maintained in a manner to achieve ~~that achieves~~ compliance with all terms and conditions of this permit."

The Department will evaluate violations of permit conditions on a case-by-case basis in order to determine whether insufficient or ineffective O&M contributed to the permit violation(s).

This change affects Part IV.F.1.a of the Final permits.

2. COMMENT: Part IV.F.1.a requires the permittee to "implement and update annually" an O&M program including an "Emergency Plan." This provision is redundant. See Part IV Sanitary Wastewater Section, page 3 of 13. The O&M Manuals for the Adams Street and River Road STPs are in the process of being updated since the permit indicates that more detail will be required in the O&M Manuals. Thus, NHSA will need more time to assure the O&M manuals meet this new requirement. Furthermore, is the Department going to be approving these plans in order to ensure that the plans are sufficient to meet the requirements under State and Federal laws? [25]

RESPONSE 2: The permit conditions pertaining to O&M in CSM Part IV.F.1.a, as compared to those O&M conditions in the Sanitary Wastewater Part IV, serve two different purposes and are not redundant. The language in CSM Part IV.F.1.a pertains to the collection system, CSO outfalls, S/F removal facilities, regulators, and related appurtenances which are owned/operated by the permittee. In contrast, the language in Sanitary Wastewater Part IV is a standard requirement in all STP permits and pertains to the wastewater treatment facility. To illustrate this, the specific language from the Part IV Sanitary Wastewater sections of NHSA's permits is provided as follows:

> Part IV, Sanitary Wastewater, Section D.1.a. of the NHSA's Adams Street Wastewater Treatment Plant, and River Road Wastewater Treatment Plant permits states that "The permittee shall update the Wastewater Treatment Plant's Operation & Maintenance (O&M) Manual including an emergency plan in accordance with the requirements of N.J.A.C. 7:14A-6.12(c)."
>
> Part IV, Sanitary Wastewater, Section D.1.b. of the NHSA's Adams Street Wastewater Treatment Plant, and River Road Wastewater Treatment Plant permits states that "The permittee shall amend the Wastewater Treatment Plant's Operation & Maintenance (O&M) 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."

The Department acknowledges and appreciates that the commenter is in the process of updating the O&M Manuals for its Adams Street and River Road Wastewater Treatment Plants. Part IV.F.1 lays out O&M components with specific milestones. Regarding any components in Part IV.F.1, unless otherwise noted, these components must be completed no later than EDP+12 months with the first annual update of the O&M Manual.

Regarding whether the Department is going to be approving the O&M plans to ensure that these plans are sufficient to meet the requirements under State and Federal laws, the Department expects the permittee to retain this information on site and make it available to the Department for review upon request in accordance with Part IV.B.1.d but will not be issuing an approval letter. The Department maintains that a comprehensive O&M Program and Manual are integral to the proper functioning of the system, compliance with the permit, and to reliably meet customer service expectations.

No changes have been made to the Final permit(s) as a result of this comment.

3. COMMENT: In Part IV. F.1.a, delete "collection system" from the treatment works components that the O&M Program and Manual must ensure are operated and maintained in compliance with the permit. NBMUA does not own any collection system within the Woodcliff STP service area. [34]

4. COMMENT: In Part IV. F.1.a, delete "collection system" from the treatment works components that the O&M Program and Manual must ensure are operated and maintained in compliance with the permit. NBMUA does not own any collection system within the Central Area CSS. [33]

5. COMMENT: PVSC requests that "the CSO outfalls, solids/floatables facilities" be deleted from Part IV.F.1.a. PVSC does not own or operate any CSO outfalls or S/F facilities. [42]

RESPONSE 3-5: Part IV.F.1.a as written is appropriate and is relevant for the collection system portion of the system. The requirements of this provision apply to the "treatment works" that are owned/operated by the permittee. While permittees may not own/operate all listed items in Part IV.F.1.a, Part IV.F.1.a is applicable to the extent that the permittee owns/operates that portion of the treatment works infrastructure that is the subject of the permit condition. The term "treatment works" in Part IV. F.1.a. of the permit, by definition, already includes "collection system" and "CSO outfalls, solids/floatables facilities." The term "treatment works" is defined in N.J.A.C. 7:14A-1.2 as:

> "…any device or system whether public or private, used in the storage, treatment, recycling, or reclamation of municipal or industrial waste of a liquid nature including intercepting sewers, outfall sewers, sewage collection systems, cooling towers and ponds, pumping, power and other equipment and their appurtenances;…Additionally, 'treatment works' means any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of pollutants, including stormwater runoff, or industrial waste in combined or separate stormwater and sanitary sewer systems."

The Department included the language "collection system" and "CSO outfalls, solids/floatables facilities" in Part IV. F.1.a of the permit simply to emphasize and highlight those treatment works components that the O&M Program and Manual must ensure are operated and maintained in compliance with the permit. Additionally, the permittee is only responsible to include in their O&M Program and corresponding Manual those treatment works components that the permittee owns/operates.

Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of these comments.

6. COMMENT: Part IV.F.1.c. requires the permittee to provide adequate operator staffing for the treatment works. This requirement is vague and can be interpreted in too many ways. It should be removed from the permit or better defined. [25]

RESPONSE 6: Part IV.F.1.c requires that the permittee provide adequate operator staffing for the treatment works. This requirement is included pursuant to N.J.A.C. 7:14A-6.12(a)4 which specifies that proper O&M includes, at a minimum, "adequate operator staffing and training." The Department maintains that this permit requirement is self-explanatory and in conformance with the NJPDES regulations. Adequate staffing is that number of personnel necessary to fully implement the SOPs, O&M and other regulatory requirements of this permit in order to meet the goals of the CWA. Please refer also the Licensed Operator Regulations at N.J.A.C. 7:10A.

No changes have been made to the Final permit(s) as a result of this comment.

7. COMMENT: Part IV.F.1.d states that "The permittee shall provide documentation that ensures that employees are properly trained to perform operation and maintenance duties…" This statement is ambiguous. The permittee can provide documentation to show employees receive proper training to perform their duties; however, it is unclear as to the intent of this requirement or how documentation "ensures" proper training. The permittee cannot "ensure" that the employee was properly trained, only that the employee was provided with the proper training to perform the operation and maintenance duties. The word "ensure" implies a guarantee of compliance that could never be met. It is recommended that the statement be changed to: "The permittee shall provide documentation that demonstrates that employees are properly trained to perform operation and maintenance duties."

Additionally, please confirm that this provision is intended to address training that is limited to CSO related training or operation. Therefore, delete "are properly trained" and replace it with "were provided with proper training." [19] [21] [25] [26] [35] [42] [44]

RESPONSE 7: The Department agrees that this language should be clarified. Part IV.F.1.d has been modified as follows:

> "d. The permittee shall provide documentation that demonstrates ~~ensures~~ that employees were provided with appropriate training ~~are properly trained~~ 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."

The permittee is required to provide documentation that employees were provided with proper training to perform the O&M duties required, and to follow the SOPs in the O&M Program and corresponding Manual. Documentation may include sign-in sheets, or some other means to verify attendance by personnel at training sessions. Permittees can also provide training so that employees can perform their duties through the use of examinations administered both in the classroom and on-the-job by those providing the training. EPA's Combined Sewer Overflows

"Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995, states that the objective for employee training "is to have well-trained employees who know their duties and how to report problems that require attention from CSS managers." However, note that N.J.A.C. 7:10A also addresses O&M and training for collection and wastewater treatment system operators.

Regarding the request for the Department to confirm that this provision is intended to address training that is limited to CSO related training or operation, please note that this provision is indeed for CSO related training and operation. Part IV.F.1.d of the CSM portion of Part IV specifically states that the training program should be for new employees and current employees in regards to the CSO O&M Program and corresponding Manual

This change affects Part IV.F.1.d of the Final permits.

8. COMMENT: PVSC requests that "CSO" be deleted from Part IV.F.1.d. PVSC does not own or operate any CSO outfalls. [42]

RESPONSE 8: Part IV.F.1.d is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit condition. Note that because PVSC does own/operate regulators, this condition is applicable to the portion owned/operated by PVSC. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure as well as **RESPONSE 3-5** in Section C of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

9. COMMENT: Regarding Parts IV. F.1.c, F.1.d, and F.1.e.i, Newark uses contractors to perform many of these CSO related O&M functions. How will this use of contractors be addressed and what will be needed to satisfy these permit sections? [35]

RESPONSE 9: The Department recognizes that the City of Newark, as well as some other permittees, may use contractors or consultants to perform many of the CSO related O&M functions under this permit. The permittee is required to conform with the conditions of the permit. If they choose to assign portions of their permit responsibilities to a third party, it is the permittee's responsibility to ensure compliance with the permit and the permittee will be held responsible for any noncompliance. In accordance with N.J.A.C. 7:14A-6.2, a permittee is required to comply with all conditions of the NJPDES permit, and the permit is not transferable to any other person absent written notice in accordance with N.J.A.C. 7:14A-16.2.

No changes have been made to the Final permit(s) as a result of this comment.

10. COMMENT: Part IV.F.1.e.ii requires a description of a Fats, Oils and Grease (FOG) Program. FOG is collected off of the primary clarifier and disposed of through an outside company. NHSA does not know if this constitutes a "program" or what legal basis is available for appealing the determination on what constitutes a "program." [25]

11. COMMENT: Regarding Part IV.F.1.e.ii, the FOG Program is currently managed by PVSC. As PVSC will continue this program, this requirement should be removed from Newark's permit. [35]

12. COMMENT: Part IV.F.1.e.ii should be eliminated, as PVSC administers the FOG Program for SIUs within the Central Area CSS, not NBMUA. [33]

13. COMMENT: Part IV.F.1.e.ii should be eliminated as the Department would administer the FOG Programs for any SIUs within the Woodcliff Area CSS, not NBMUA. [34]

RESPONSE 10-13: Part IV.F.1.e.ii simply requires that a description of the permittee's FOG Program be included as part of the O&M Program and Manual, and does not assign responsibility for administration of that FOG program.

Part IV.F.1.e.ii in the CSM portion of the permit is not intended to mean the collection and disposal of FOG off of the STPs primary clarifiers, but rather refers to the identification and control (through pretreatment at the source of the FOG discharge) of FOG from being introduced into the CSS. FOG may cause pass-through or interference (e.g., blockages and obstructions) in the STP resulting in SSOs into basements and onto streets which can endanger public health in the municipalities. The permittee's FOG Program is intended to address these concerns. Permittees have both the responsibility and the authority to protect their collection systems and STPs from discharges that may be injurious or deleterious to the STP. Part IV.F.1.e.ii is simply requiring a description of the program or SOPs that the permittee has in place to address FOG.

N.J.S.A. 40:14A-28(b) prohibits any discharge into the POTW, either directly or indirectly, of "any matter or thing which is or may be injurious or deleterious to such sewerage system, or to its efficient operation"; and 40 CFR 403.5(a)1 prohibits the introduction of any pollutants into a POTW which may cause pass-through or interference. Furthermore, N.J.S.A. 58:11-53(b) states that "…municipalities, authorities, commissions, or any public bodies or agencies, owning, operating or controlling, separately or jointly, any public sewage treatment plant shall: Adopt rules and regulations … in order to provide full information as the quantity, character, and composition of any sewage which be discharged into the public sewage treatment plant, and establishing requirements and procedures for prompt amendment …"

While the Department recognizes that certain permittees may have their FOG program managed by another entity (e.g. PVSC manages the City of Newark's FOG Program), the Department does not agree that this justifies deletion of this requirement from those permits. Rather, to demonstrate compliance with this permit requirement, the permittee shall provide documentation verifying that another entity is managing the FOG Program and include a description of the program in the permittee's O&M Program and corresponding Manual.

No changes have been made to the Final permit(s) as a result of these comments.

14. COMMENT: Part IV.F.1.e.iii indicates that the characterization shall include a spreadsheet organized by CSO outfall of the capacity, dimensions, age, type of material, and specific

locations of: CSO Outfalls, etc., and GIS mapping of the information on or before the first annual update of the O&M Program and Manual. The Bayonne MUA does not have all of the information required. The schedule for this requirement is unclear. The extent of data to be included, and the fact that manhole invert data will need to be field generated, will require time to generate. What is the proposed reason for including invert elevations in PDF mapping? [19] [26] [42]

The deadline for completion of this requirement should be moved to EDP +12 months. [26]

15. COMMENT: Part IV.F.1.e.iii requires an updated characterization of the entire collection system. NHSA does not have all of the information required. The extent of data to be included, and the fact that manhole invert data will need to be field generated, will require time to generate. This is an example of a new requirement being imposed that would purport to put NHSA into immediate non-compliance absent a compliance schedule. The permittee would need at least EDP +32 months to generate the data. [25]

16. COMMENT: While the City of Elizabeth does have most of the information required at Part IV.F.1.e.iii, they do not have all of the information. Due to the age and size of the City sewer system, the City will be unable to provide a spreadsheet at the time of the first quarterly report. The City requests that the due date for compliance with this requirement be timed with the submission of the GIS data which is required with the first annual update of the O&M Program and Manual. [12]

17. COMMENT: The characterization effort at Part IV.F.1.e.iii will be an ongoing effort until completion of the Sewer Map required in Part IV.D 2.b. The phrase "the spreadsheet shall be completed no later than at the time of the first quarterly Progress Report" should be deleted. [28] [31]

18. COMMENT: Part IV.F.1.e.iii states that the characterization spreadsheet depends on information developed in the sewer system characterization required by Section G.1., which will not be completed until after the first quarterly progress report is due. Therefore, in the sentence "This characterization shall include…", delete "quarterly progress report", and replace it with "annual update of the O&M Program and Manual." [20] [29] [32] [40] [42]

19. COMMENT: The characterization spreadsheet depends on information that will be developed in the sewer system characterization required by Section G.1, which will not be completed in time for the first quarterly progress report. Replace "the spreadsheet shall be completed no later than at the time of the first quarterly progress report" with "the spreadsheet shall be completed no later than at the time of the first annual report of the O&M Program and Manual." [33] [34]

20. COMMENT: The characterization spreadsheet depends on information developed in the sewer system characterization required by Section G.1., which will not be completed until after the first quarterly progress report. Therefore, in the sentence "This characterization shall include…", delete "quarterly progress report," and replace it with "the completion of the sewer system characterization." [44]

21. COMMENT: The characterization spreadsheet depends on information developed in the sewer system characterization required by Section G.1., which will not be completed until after the first quarterly progress report is due. Therefore, in the sentence "This characterization shall include…", delete "quarterly progress report", and replace it with "annual update of the O&M Program and Manual." Some of the information required for the spreadsheet should be available and can be included within one year, but some other items (e.g. manhole inverts, historical experience) may not be available within one year.

In addition, how can the spreadsheet be certified as complete if some information is not readily available? And if not submitted, will Newark be in violation of the permit? [35]

22. COMMENT: Regarding Part IV.F.1.e.iii, are all individual catch basins to be listed in the spreadsheet, or only an inventory including quantities and types? [28] [31]

RESPONSE 14-22: The Department has revisited this permit condition both in content and in format where this condition is now extended into Part IV.F.1.e.iii and Part IV.F.1.f due to character space limitations in the Department's database. The Department has determined that changes are warranted regarding both the information collected as well as the compliance due date (EDP+6 months) as indicated in the CSO Submittal Summary as well as in **RESPONSE 55-62** of Section B of the Response to Comments document. As a result, Part IV.F.1.e.iii has been revised where the excerpt that is applicable to all CSO permits is as follows:

"iii. An updated characterization of the entire collection system owned/operated by the permittee that conveys flows to the treatment works. The permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information. A complete list of studies performed by all CSO permittees…..is summarized at the end of this permit."

This condition continues into Part IV.F.1.f where changes are as follows:

"f. This characterization in Section F.1.e.iii above shall include a spreadsheet, ~~(the spreadsheet shall be completed no later than at the time of the first quarterly Progress Report)~~, organized by CSO outfall, as appropriate, of the capacity, dimensions, age, type of material, and specific location of~~:~~ the items listed below. This spreadsheet shall be completed no later than EDP + 6 months.

i. CSO outfalls (if applicable);
ii. Tide gates (if applicable);
iii. Solids/floatables controls (if applicable);
iv. Regulators (if applicable);
~~- Catch basins;~~
v. G~~g~~ravity lines and force mains (if applicable), including size, length and direction of flow;
~~- Manholes, including invert elevations of all gravity sewers inlets and outlets;~~
vi. Pump stations (if applicable);
vii. Significant Indirect ~~Industrial~~ Users (SIUs); and

viii. Specific locations that have historically experienced the following: blockages, bottlenecks, flow constrictions, sewer overflows including to basements, streets and other public and private areas, ~~overflows~~ or related incidences."

Most notably, the Department has eliminated the requirement for catch basins and manholes (including invert elevations) to be included in the characterization spreadsheet. The Department has also extended the compliance date by an additional three months from the date proposed in the Draft permit. The Department recognizes that this due date is still prior to completion of the sewer system characterization requirement in Part IV.G.1 as discussed in the comments. However, the Department maintains that the requirements of Part IV.F.1.f are markedly different from Part IV.G.1 where the characterization spreadsheet could serve as input data for the system characterization at Part IV.G.1. In other words, the Department maintains that it is appropriate that the characterization spreadsheet in Part IV.F.1.f is due before the sewer system characterization in Part IV.G.1.

The characterization spreadsheet required in Part IV.F.1.f is not required to be certified or submitted to the Department. This spreadsheet is required to be maintained on site and is subject to inspection by the Department upon request. Should the permittee not complete the characterization spreadsheet by the deadline specified in their permit, the permittee will be in violation of this permit requirement.

This change affects Part IV.F.1.e.iii and Part IV.F.1.f of the Final permits.

23. COMMENT: Part IV.F.1.e.iii should be updated to include any CSO or flow regulators that are owned or operated by the permittee. [11]

RESPONSE 23: This comment was with respect to permits issued to JMEUC and MCUA regarding Part IV.F.1.e.iii which is now Part IV.F.1.f. The Department agrees that several treatment works components (CSO outfalls; tide gates; S/F controls; and regulators) were inadvertently omitted from the listing of items for the sewer system characterization spreadsheet (Part IV.F.1.f) in permits for JMEUC and MCUA. Additionally, one treatment works component (CSO outfalls) was inadvertently omitted from the sewer system characterization spreadsheet listing in the permit for BCUA.

This has been rectified in the Final permits for these three facilities where all components are now consistent with the components described in **RESPONSE 14-22** in Section C of the Response to Comments document.

24. COMMENT: The characterization spreadsheet as included at Part IV.F.1.e.iii requires information that is outside Newark's custody, control, or responsibility, including information regarding SIUs. PVSC is the Department designated agency with oversight responsibility for SIUs within Newark. References to this information should be removed from Newark's Permit. [35]

25. COMMENT: Regarding Part IV.F.1.e.iii, remove SIUs from the list of components to be characterized in a spreadsheet, since SIUs in the system are regulated by PVSC, not NBMUA. [33]

26. COMMENT: Regarding Part IV.F.1.e.iii, remove SIUs from the list of components to be characterized in a spreadsheet, since SIUs in the system are regulated by the Department, not NBMUA. [34]

27. COMMENT: SIUs are typically connected to the local municipal sewer system. Therefore, in Part IV.F.1.e.iii, after (SIUs), insert "directly connected to the sewer system in which the permittee is the owner/operator." [15]

RESPONSE 24-27: Part IV.F.1.f (formerly Part IV.F.1.e.iii) requires a listing of SIUs that discharge into the treatment works owned/operated by the permittee and organized by CSO outfall. The Department maintains that this is not a burdensome requirement as this information is readily available. The Department also maintains that it is appropriate for the owner of the treatment works to have knowledge of what SIUs are discharging into their system.

Please refer to the revised permit language as included in **RESPONSE 154-159** and **RESPONSE 160-162** and **RESPONSE 163-166** all of which are in Section C of the Response to Comments document concerning the requirements relating to NMC #3 as it relates to SIUs. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of these comments.

28. COMMENT: The characterization spreadsheet at Part IV.F.1.e.iii requires information that is outside Newark's custody, control, or responsibility, including information regarding the manufacturer of tide gates. PVSC owns and/or constructed the tide gates and may have this information. References to this information should be removed from Newark's Permit. Similarly, JMEUC does not have operational control of the area described for the purposes of the characterization of the entire collection system; therefore, this requirement should not apply. [9] [35]

29. COMMENT: BCUA does not have responsibility for the collection system and the various facilities as listed in the items to be included in Part IV.F.1.e.iii. The collection system should be changed to Interceptor Sewer System and the three BCUA CSO Regulators in Ridgefield Park. In addition, the list of requirements should be changed to eliminate facilities that are owned and operated by the CSS municipalities (i.e. CSO Outfalls). [21]

30. COMMENT: Regarding Part IV.F.1.e.iii, replace "entire collection system owned/operated by the permittee" with "sewer system components that are owned/operated by the permittee." NBMUA does not own or operate the collection system within North Bergen Township. In addition, the list of components to be characterized in a spreadsheet should include only those components owned and operated by NBMUA. [33]

31. COMMENT: Regarding Part IV.F.1.e.iii, replace "entire collection system owned/operated by the permittee" with "sewer system components that are owned/operated by the permittee." NBMUA does not own or operate the collection system within North Bergen Township or the Town of Guttenberg. In addition, the list of components to be characterized in a spreadsheet should include only those components owned and operated by NBMUA. [34]

32. COMMENT: PVSC requests that "CSO outfalls,", "Solids/floatables controls;" and "Catch basins;" be deleted from Part IV.F.1.e.iii. PVSC does not own or operate any CSO outfalls, S/F facilities or catch basins. [42]

33. COMMENT: Regarding Part IV. F.1.e.iii, the Town of Harrison does not own any regulators or pump stations. [44]

RESPONSE 28-33: The Department does not agree that the "entire collection system owned/operated by the permittee" in the first sentence of Part IV.F.1.e.iii of the permit should be replaced with "sewer system components that are owned/operated by the permittee." The "entire collection system" encompasses ALL aspects of the collection system including SIUs, while "sewer system components" only refers to the infrastructure of the collection system. As described in **RESPONSE 24-27** in Section C of the Response to Comments document, SIUs are included in the itemized list in Part IV.F.1.f that need to be identified in the characterization spreadsheet.

For those requesting that various components of the entire collection system listed in Part IV. F.1.f of the permit be deleted due to a lack of ownership and/or operational responsibility, please note that the permittee shall include "An updated characterization of the entire collection system owned/operated by the permittee that conveys flows to the treatment works." In other words, the permittee is only responsible to include in their characterization spreadsheet, O&M Program and corresponding Manual, those treatment works components that are "owned/operated by the permittee" as specifically stated in Part IV.F.1.e.iii. For example, if the City of Newark does not own the tide gates associated with its CSO outfalls, then the City of Newark simply needs to make note of it on the spreadsheet and in their O&M Program and corresponding Manual. However, if the City of Newark is responsible for the operation of any of the tide gates in the permittee's CSS, then the City of Newark is required to include this information as described in Part IV.F.1.f.

No changes have been made to the Final permit(s) as a result of these comments.

34. COMMENT: There is a costly requirement for detailed GIS mapping in Part IV.F.1.f for the entire sewer systems and the permitted entities. Many older municipalities have not translated their sewer maps to GIS format, or may not even have a good set of as-built sewer plans. The time for producing such a mapping effort may be measured in years, not months. We believe that producing a GIS map is a worthy undertaking, but we need much more time to complete this task. [15] [20] [31] [35] [40] [44]

35. COMMENT: There is a costly requirement for detailed GIS mapping for the entire sewer system. The time for collecting the data and producing such a detailed map effort may be a year or more. We believe that producing a GIS map is a worthy undertaking; however, the cost and time of preparing this asset management GIS tool will be a large undertaking for Fort Lee that must be factored into the budget and schedule. [28]

36. COMMENT: Completion of the GIS data acquisition and mapping project will be a monumental undertaking, and cannot be completed "on or before the first annual update of the O&M Program and Manual" as the schedule requires. It is estimated that this task will require five years for the City of Paterson to complete fully, and the schedule should be revised to reflect this timeline. Annual status reports and milestones could be established and incorporated into the permit to assure that the project remains on schedule. [40]

37. COMMENT: The GIS mapping required will take time to produce because of the amount of detail required. The time for producing such a map should be measured in years, not months, for most communities. All of it is highly weather dependent. [29]

38. COMMENT: The request for completion of the GIS mapping that includes, among other things, the location of all catch basin and manholes (with inverts) in four months is a highly implausible goal for Jersey City and other cities of similar size. Jersey City has been in engaged in the creation, growth, and improvement of its GIS since 2000 where we have created GIS maps with over 100 shapefiles in the current GIS. While significant progress has been made, we have not obtained all system manhole and catch basin information. Complete as-built drawings of the original Jersey City CSS, which was constructed in the early 1900's, do not exist in our files. We request that the Department either extend the timeframe to obtain this remaining data or reduce the scope of this effort. [30]

39. COMMENT: The Village of Ridgefield Park does not currently have a GIS mapping system and the data needed to complete one will need to be field collected and verified. The deadline for compliance should be modified to: "Unless otherwise approved by the Department this map should be completed on or before EDP +16 months." [19]

40. COMMENT: PVSC's system is very large; field verification of its assets will be required prior to GIS mapping, therefore the time provided in the Draft permit is insufficient to complete the required tasks. Procurement of professional services takes a minimum of 10 weeks. PVSC requests that this requirement be revised to EDP +16 months. [42]

41. COMMENT: The Bayonne MUA does not currently have a GIS mapping system and the data needed to complete one will need to be field collected and verified. The deadline for compliance should be modified to: "Unless otherwise approved by the Department this map should be completed on or before EDP +36 months." [26]

42. COMMENT: The NHSA does not currently have a GIS mapping system and the data needed to complete one will need to be field collected and verified. The deadline for compliance should be modified to: "this map should be completed on or before EDP +43 months." [25]

RESPONSE 34-42: Part IV.F.1.f, as contained in the draft permits, has been renumbered as Part IV.F.1.g in these final permits and has been modified as follows:

> "g~~f~~. The permittee shall delineate the characterization information required in Section ~~F.1.e.iii~~ F.1.f on a GIS map, as applicable, pursuant to N.J.A.C. 7:1D-Appendix A and shall follow the NJ GIS protocol at http://www.state.nj.us/dep/gis/standard.htm. This map shall be completed on or before the first annual update of the O&M Program and Manual."

Many of the permittees have expressed concern regarding the costs to comply with the GIS requirements as well as the timeframe to complete this permit requirement. As described in **RESPONSE 14-22** in Section C of the Response to Comments document, the Department has modified Part IV.F.1.f to eliminate the requirement for itemizing catch basins and manholes in the characterization spreadsheet so these components do not need to be delineated on the GIS map. This significantly reduces the scope of components to be delineated; therefore, the Department maintains that EDP+12 months is a sufficient amount of time. Further, this information is useful for the purposes of completion of the LTCP.

The Department has been independently gathering GPS information related to pump stations, STPs and outfalls for emergency response related purposes. Permittees can contact the Division of Water Quality (Permit Administration Section) regarding the potential use of this information to supplement their efforts.

This change affects Part IV.F.1.g of the Final permits.

43. COMMENT: Guttenberg has no right to access County structures whether they are catch basins, manholes or pipelines. Mapping of those should not be the responsibility of Guttenberg. The County owns all of the catch basins on Boulevard East and on Kennedy Boulevard. They also own the structures and pipelines on River Road and the bridge structure on Bulls Ferry Road. [29]

RESPONSE 43: As described in **RESPONSE 14-22** in Section C of the Response to Comments document, the Department has removed catch basins and manholes from the list of required components at Part IV.F.1.e.iii. Nonetheless, Part IV.F.1.e.iii and Part IV.F.1.f are applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit condition. In other words, the permittee is only responsible to include in their O&M Program and corresponding Manual, characterization spreadsheet, and GIS map those treatment works components that the permittee owns/operates. If the Town of Guttenberg does not own or operate specific components from Part IV.F.1.f within their CSS, then the Town of Guttenberg simply needs to make note of it either on the spreadsheet or in their O&M Program and corresponding Manual. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of this comment.

44. COMMENT: In Part IV.F.1.f, please revise "Section F.1.e" to "Section F.1.e.iii" for purposes of clarity. [6]

RESPONSE 44: The Draft permits for the City of Gloucester (NJ0108847), the City of Camden (NJ0108812), and CCMUA (NJ0026182) contain an erroneous reference to Section F.1.e where the reference should have been F.1.e.iii. Please refer to **RESPONSE 34-42** in Section C of this Response to Comments document for the revised language as included in all NJPDES CSO permits.

No additional changes have been made to the Final permit(s) as a result of this comment.

45. COMMENT: We are in agreement with the need to have customer municipalities perform the tasks contained in Part IV.F.1.g.i, ii, and iii. [6] [15] [20] [40] [42] [44]

The "sewer use agreements with its customer municipalities" are contracts between two parties that cannot be changed without the agreement of both parties. The subject matter in i., ii., and iii. cannot be unilaterally imposed on other parties without their consent. Please supply citations for any statutes, rules, or regulations that require the actions proposed in this section and allow a unilateral change to in-place agreements to effectuate the change. Please also cite any statutes, rules, and regulations which would allow a permittee to regulate a customer system in such a manner. Also, please cite any statutes, rules, and regulations that provide a permittee with an enforcement mechanism to assure compliance with this section. As an alternative to Part IV.F.1.g, the Department should investigate whether there is a mechanism available for the Department to propose and enforce these requirements as part of a permit or other means available to the State. [6] [15] [20] [32] [35] [40] [42] [44]

In the event that such a unilateral revision is permitted, the time allotted for negotiation and implementation should be extended to a minimum of 12 months. [6] [15] [20] [35] [40] [42] [44]

46. COMMENT: Sewer use agreements are contracts between two parties that cannot be changed without the agreement of both parties. These requirements cannot be unilaterally imposed on other parties without their consent.

NBMUA has no regulatory authority over North Bergen Township, and therefore no means of requiring or ensuring that North Bergen Township, which owns and operates the conveyance systems within North Bergen, complies with any of the terms in this permit. It is apparent that the Department lacks authority to unilaterally change agreements between NBMUA and the Township of North Bergen. If the Department, through this permit, intends to impose requirements on North Bergen Township, then NBMUA requests a meeting with the Department and North Bergen Township to discuss how these issues can be addressed. [33]

NBMUA has no regulatory authority over North Bergen Township or the Town of Guttenberg, and therefore no means of requiring or ensuring that either municipality, which own and operate the conveyance systems within North Bergen and Guttenberg, comply with any of the terms in this permit. It is apparent that the Department lacks authority to unilaterally change agreements

between NBMUA and North Bergen Township or between NBMUA and the Town of Guttenberg. If the Department, through this permit, intends to impose requirements on North Bergen Township or the Town of Guttenberg, then NBMUA requests a meeting with the Department and both municipalities to discuss how these issues can be addressed. [34]

Please enter "attempt to" before the word "revise", since NBMUA cannot be held accountable for the actions of another entity. The time allotted to review and revise (as needed) rules and ordinances, as well as to re-negotiate sewer use agreements (as needed) should be extended to EDP +12 months at a minimum. [33] [34]

47. COMMENT: PVSC objects to any requirement providing that it must revise its sewer use agreements with customer municipalities. Sewer use agreements are legally binding contracts. PVSC has no authority to unilaterally revise those contracts; thus, compliance with any such proposed condition is impossible. Further, even if PVSC opened negotiations on the sewer use agreements, PVSC cannot guarantee that such negotiations would be successful and result in compliance with the permit.

PVSC has 48 contributing municipalities. Setting a deadline of four months to draft revised contract language, open negotiations with, close negotiation with, and get consent from the governing bodies of 48 separate municipalities is unreasonable, arbitrary, and capricious. Additionally, PVSC's Rules and Regulations require substantial time for change, a process which is ultimately governed by the Department. PVSC requests that the condition be changed to require submission of proposed rules changes to the Department within six months.

JMEUC states that the text of Part IV.F.1.g.ii should state that "custom communities" refer to those communities connected to the JMEUC interceptor sewer system which includes the owner municipalities. In addition, revision of agreements may only be made as provided in existing agreements. [9] [42]

48. COMMENT: The time frame of 120 days for the review and revision of sewer use ordinances in Part IV.F.1.g is too short. We suggest an extension of this time to 180 days since any changes to sewer use ordinances requires legal review and approvals, and cannot be accomplished within 120 days with other competing priorities. [27]

49. COMMENT: Regarding Part IV.F.1.g, four months is not sufficient time to review the ordinances and agreements, develop revisions, and approve those revisions in the manner a municipality must proceed with such changes. In addition, some agreements may have contractual terms that cannot be changed. Please extend this milestone to EDP +12. [28]

50. COMMENT: Regarding Part IV.F.1.g, four months is not sufficient time to review the ordinances and agreements, develop revisions, and approve those revisions. Please extend this milestone to EDP +12. [31]

51. COMMENT: In the event that the Department wishes to impose a requirement requiring the permittee to attempt to enter into contract negotiations, the time allotted for negotiation and implementation must be extended to 12 months, at a minimum. [44]

52. COMMENT: In Part IV.F.1.g, insert "attempt to" between "municipalities and" and "revise." Also, delete "4" and replace with "12." [20] [29] [32] [35] [42] [44]

RESPONSE 45-52: The Department has revisited this permit condition and has determined that changes are warranted to both the permit condition in content and format as well as to the compliance due date as indicated in the CSO Submittal Summary. Through inclusion of the regulatory terms of non-excessive infiltration and non-excessive inflow, this permit condition better clarifies the Department's intent. Accordingly, Part IV.F.1.h (formerly Part IV.F.1.g) has been revised as follows:

"h~~g~~. The permittee shall review its rules, ordinances, and/or its sewer use agreements ~~with its customer municipalities~~ and create an anticipated schedule to revise them within 6 ~~4~~ months of the EDP, if necessary. In general, this schedule shall not extend beyond the due date for the LTCP as per Part IV.D.3.b.iv. This schedule shall ~~to~~ require the customer municipalities to:

i. operate and maintain their treatment works,

ii. identify ~~Infiltration and Inflow (~~I/I~~)~~ and reduce to meet the definition of non-excessive infiltration (in combined and separately sewered areas) and non-excessive inflow (in separately sewered areas) as defined in N.J.A.C. 7:14A-1.2 ~~where appropriate~~ ; ~~-~~and

iii. identify and eliminate interconnections and cross-connections in storm sewers."

Non-excessive infiltration and non-excessive inflow are defined at N.J.A.C. 7:14A-1.2 as follows:

> "Nonexcessive infiltration" means the quantity of flow which is less than 120 gallons per capita per day (domestic base flow and infiltration) or the quantity of infiltration which cannot be economically and effectively eliminated from a sewer system as determined in a cost-effectiveness analysis. For domestic treatment works receiving wastewater from combined sewers, nonexcessive infiltration means the quantity of flow attributable to infiltration during dry weather shall be less than 40 gallons per capita per day (gpcd) or 1,500 gallons per day per inch diameter per mile of sewer.
>
> "Nonexcessive inflow" means the maximum total flow rate during storm events which does not result in chronic operational problems related to hydraulic overloading of the treatment works or which does not result in a total flow of more than 275 gallons per capita per day (domestic base flow plus infiltration plus inflow) during a significant rainfall event which causes surface ponding and surface runoff. Chronic operational problems may include surcharging, backups, bypasses, and overflows.

The Department maintains that CSO permittees should make concerted efforts to revise/modify such agreements cooperatively through negotiation with all parties in their hydraulically

connected sewer system. Municipalities have the ability to pass ordinances to address sources of I/I. STP permittees have the ability to modify their Rules and Regulations to require their customer municipalities to operate and maintain their treatment works, to identify and reduce I/I in accordance with the above requirement, and to identify and eliminate interconnections and cross-connections in storm sewers. Furthermore, permittees have the authority under N.J.S.A. 40:14A, N.J.S.A. 40:14B, and N.J.S.A. 58:14 to negotiate with both combined and separate sewer communities within the STP's service area to implement NMCs and LTCP mechanisms. Please refer to **RESPONSE 26-42** of Section A of the Response to Comments document.

The Department has revised Part IV.F.1.h.ii to ensure consistency with Part IV.F.7.c.

This change affects Part IV.F.1.h of the Final permits.

53. COMMENT: Part IV.F.1.g states in part: "The permittee shall review its rules, ordinances and its sewer agreements with its customer municipalities…" The permittee has no customer municipalities and this requirement should be eliminated from their permit. [19] [25] [26]

RESPONSE 53: The Department has modified the permit language as described in **RESPONSE 45-52** in Section C of the Response to Comments document. Not only is this requirement applicable to STPs which have member municipalities, but is also applicable to municipalities to the extent they have user agreements with the STPs. Permittees are also required to review their rules and ordinances to determine if revisions are necessary. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No additional changes have been made to the Final permit(s) as a result of this comment.

54. COMMENT: Regarding the use of the term "Infiltration and Inflow (I/I)…" in Part IV.F.1.g.ii, change this to "Excessive Infiltration and Inflow (I/I)" which is defined in N.J.A.C. 7:14A-1.2. The qualifier "excessive" should be used throughout the proposed permit before any references to I/I. [15] [20] [28] [29] [31] [32] [33] [34] [35] [40] [42] [44]

RESPONSE 54: As explained in **RESPONSE 45-52** of Section C of this Response to Comments document, the Department agrees that changes are appropriate and has modified the permit condition regarding I/I. Through inclusion of the regulatory terms of non-excessive infiltration and non-excessive inflow, this permit condition better clarifies the Department's intent.

No additional changes have been made to the Final permit(s) as a result of this comment.

55. COMMENT: In addition to the review and possible revision to existing sewer use agreements or ordinances, EPA recommends that the permittee be required to perform flow monitoring in each section of the entire hydraulically connected sewer system. The permittee should be required to implement corrective measures to reduce I/I and peak flows that may be contributing to CSOs by using economic incentives, or other innovative means, in addition to the possible revision of sewer use agreements. Alternatively, to ensure satellite sewer collection systems are

appropriately maintained, each satellite system that is hydraulically connected to the STP/collection system could be listed as a co-permittee. [18]

RESPONSE 55: The Department agrees that flow monitoring in each section of the hydraulically connected sewer systems is an additional measure to ascertain the relative amounts of I/I that the customer municipalities are contributing by evaluating the average vs. peak flows. Flow monitoring can also document trends in effectiveness of certain CSO controls. Most STPs monitor these flows as part of their O&M and in order to properly bill their customers based on flow. Therefore, the Department maintains that most of this information is being collected by the STPs and would be available for future evaluation. Please refer to **RESPONSE 45-52** in Section C of the Response to comments document for additional information on I/I requirements.

Also, as stated in **RESPONSE 26-42** in Section A of the Response to Comment document, with regard to the request for co-permittees, the Department did consider this approach for this round of individual NJPDES CSO permits but chose to proceed with separate individual permits at this time.

No changes have been made to the Final permit(s) as a result of this comment.

56. COMMENT: Part IV.F.1.h requires that the O&M manual include SOPs "in accordance with the appropriate manufacturer's recommendations and equipment manuals." The appropriate approach on SOPs should be guided by the permittee's experience, not the manufacturer's recommendations. SOPs in a manual are impractical for the number of assets and preventative maintenance tasks that are performed. In addition, this entire section appears to set forth requirements that are beyond those required by applicable rules. The Department needs to identify where in the rules the specific requirements are established. [9] [25]

57. COMMENT: Paragraph F.1.h does not include operator experience as an element of SOP development. Equipment manuals and manufacturers are always supplemented by site specific operator experience. Please modify as follows: "equipment manuals at a minimum and actual operation and maintenance experience" [28] [31]

58. COMMENT: Insert "and actual operations and maintenance experience" immediately after "equipment manuals." [15] [20] [35] [40] [42] [44]

RESPONSE 56-58: Part IV.F.1.h, as contained in the draft permits, has been renumbered as Part IV.F.1.i and Part IV.F.1.j and is stated as follows:

> "i~~h~~. The permittee shall include ~~Standard Operating Procedures (~~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.

j. 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.~~ for the following items:"

The starting point for any O&M Manual and specific SOPs for facility equipment begins with the equipment manufacturer's O&M Manuals. These manuals provide the manufacturer's recommended operational procedures, step-by-step procedures for both preventive and corrective maintenance, inspection frequencies, recommended spare parts, lubricants (greases and oils), etc. The Department maintains that it is appropriate to require permittees to incorporate or reference this information into their O&M Program and corresponding Manual.

The Department also recognizes that operator experience is an important factor where the Department uses the phrase "at a minimum" in Part IV.F.1.i so that permittees can incorporate their experience in fine-tuning the SOPs. This allows permittees to address any performance related requirements, site-specific conditions, or modifications made to the equipment and/or controls.

Regarding the regulatory authority for this requirement, the Department maintains that Part IV.F.1.i and Part IV.F.1.j are consistent with the National CSO Policy and N.J.A.C. 7:14A-11 (Appendix C). The first of the NMCs, *Proper Operation and Maintenance of the CSS and CSO Outfalls* is described in EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995. In this guidance document, permittees are required to establish a proper O&M program for the CSS, CSO outfalls, and STP that clearly establishes operation, maintenance, and inspection procedures to ensure these components will function in a way to maximize treatment of combined sewage and still comply with NPDES permit limitations.

Finally, the Department disagrees with the commenter's assertion that "SOPs in a manual are impractical for the number of assets and preventative maintenance tasks that are performed." The Department maintains that SOPs are an essential and fundamental part of an O&M Manual, and that SOPs need to exist for all of the infrastructure components owned/operated by the permittee in order to ensure the efficiency, reliability and longevity of the permittee's assets. Please note that the permittee's O&M Manual is not required to be a bound paper document. Having the O&M Manual on the permittee's computers or computer system and made available to the permittee's administration, staff, operators, and/or maintenance personnel is acceptable to the Department. As stated in **RESPONSE 2** of Section C of this Response to Comments document, and pursuant to N.J.A.C. 7:14A-6.12(c)1, the O&M Manual shall be made available for inspection upon request by an authorized representative of the Department.

This change affects Part IV.F.1.i and Part IV.F.1.j of the Final permits.

59. COMMENT: SOPs are one method of producing operating guidance for STP operators. As such, they are dynamic in nature and may change frequently. Therefore, they should not be part of an O&M Manual and an SOP is guidance for operations. SOPs cannot ensure any type of

result on their own. Therefore, change this section to a listing of topics to be covered by SOPs. [20] [32] [35] [40] [42] [44]

RESPONSE 59: The Department maintains that SOPs are an integral part of an O&M Manual and, when properly and fully implemented, provide permittees assurance that their CSS, CSO outfalls, and STP will function in a way to maximize flow to the STP for treatment of combined sewage, thereby reducing CSO discharges. The Department agrees that SOPs are dynamic in nature and may change frequently, which is one of the reasons why permittees are required to update the O&M Program and corresponding Manual at least annually, in accordance with Part IV.F.1.a.

No changes have been made to the Final permit(s) as a result of this comment.

60. COMMENT: Delete Part IV.F.1.h in its entirety. Replace it with "The Permittee shall provide O&M procedures and Manual, including an Emergency Plan as required in N.J.A.C. 7:10A-1.12 and 7:14A-6.12."

A permit may only require that a permittee be governed by a regulation. Should the Department believe that the regulation be inadequate, it must change the regulation by following its own rules in doing so. [20] [29] [35] [40] [42] [44]

61. COMMENT: Delete Part IV.F.1.h in its entirety and replace it with "The Permittee shall provide O&M procedures and Manual, including an Emergency Plan as required in N.J.A.C. 7:10A-1.12 and 7:14A-6.12." Thus, the permittee is governed by the appropriate State regulation in this matter. [32]

RESPONSE 60-61: Part IV.F.1.j (formerly Part IV.F.1.h) is stated in **RESPONSE 56-58** of Section C of this Response to Comments document. The Department does not agree that Part IV.F.1.j. should be deleted and replaced with the suggested language. Part IV.F.1.j serves to provide a framework for SOPs in the O&M Program and corresponding Manual for the CSS. The Department maintains that this requirement is appropriate and consistent with the National CSO Policy, N.J.A.C. 7:14A-11 (Appendix C), and the EPA Guidance Manual on Nine Minimum Controls. The Department also maintains that this section will prove useful for permittees in developing their CSO program and in understanding the Department's expectations for compliance with the permit in relation to the O&M Program and Manual requirements.

No changes have been made to the Final permit(s) as a result of these comments.

62. COMMENT: In the second to last sentence before sub-section I in Part IV.F.1.h, replace "of the entire collection system that conveys flows to the treatment works" with "those CSS components that are owned/operated by the permittee." [33] [34]

RESPONSE 62: The Department maintains that inclusion of the suggested language is unnecessary since Part IV.F.1.j (formerly Part IV.F.1.h) is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit conditions. Specifically, the first sentence of Part IV.F.1.j includes the phrase "…to ensure that

the entire collection system that is owned/operated by the permitttee..." Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No additional changes have been made to the Final permit(s) as a result of this comment.

63. COMMENT: Newark uses contractors to perform many of these CSO related O&M functions. While the specific results/outcomes are specified, the means and methods to perform the work is the responsibility of the contractor. How will this be addressed under this permit section? [35]

RESPONSE 63: As stated in **RESPONSE 9** in Section C of the Response to Comment document, the Department recognizes that the City of Newark, as well as some other permittees, may use contractors or consultants to perform many of the CSO related O&M functions under this permit. The permittee is required to conform with the conditions of the permit. If they choose to assign portions of their permit responsibilities to a third party, it is the permittee's responsibility to ensure that those third parties comply with the permit and the permittee will be held responsible if they do not.

No changes have been made to the Final permit(s) as a result of this comment.

64. COMMENT: Part IV.F.1.h requires the development of SOPs where the word "ensure" is used. Words like "ensure", "at all time", and "greatest extent practical" imply a guarantee of compliance that could never be met with a dynamic system such as combined sewers. As with any sewer system, the unforeseen is possible and thus there is no means of ensuring compliance at all times. For example, a regulator valve can be inspected and functioning one minute and the next can become partially clogged by a large plastic bag or other material creating a dry weather overflow. There is no reasonable means of ensuring this does not happen. The phrase "to the extent practical" already indicates an effort to maximize.

The language in the permit should be modified to read:

"i. Illustrate that the entire collection system owned/operated by the permittee that conveys flows to the treatment works functions ~~at all times~~ in such a manner…

ii. Illustrate that the storage and conveyance….

iii. Illustrate that the discharges for SIUs contributing to the CSOs are minimized to the ~~greatest~~ extent practical…

iv. Illustrate that ~~there will be no~~ dry weather overflows shall be prevented to the extent possible

vi. Illustrate the solids/floatables appurtenances will be …..." [12] [19] [21] [25] [26]

65. COMMENT: Part IV.F.1.h makes reference to SOPs "ensuring" certain results and "preventing" certain outcomes. SOPs are guidance documents and cannot "ensure" the result of any process, or by themselves "prevent" any outcome. The word "ensure" should be replaced with "demonstrate." The words "at all times" in Part IV F.1.h.i should be deleted because an SOP cannot guarantee performance. [28] [31]

66. COMMENT: Part IV.F.1.h utilizes the words "ensure" and "at all times." PVSC requests that these words be deleted from this section and throughout the entire permit. These words imply a guarantee of compliance that can never be met with a dynamic system. Unforeseen circumstances are possible and there is no means of ensuring compliance at all times. The National CSO Policy provides for an implementation of the LTCP over a long period of time (e.g. 20 or 30 years) to address overflows, and it does not necessarily require the elimination of all overflows. [42]

67. COMMENT: "Ensure" implies a guarantee of compliance. Delete the word "ensure" everywhere it appears in this entire section and replace it with "demonstrate." [12] [20] [32] [35] [40] [42] [44]

68. COMMENT: While the City of Paterson may operate and maintain the collection system to ensure that it can properly convey flows to the STP, it cannot "ensure that the entire collection system ….functions at all times in such a way as to not result in sewage overflows" due to capacity limitations in the interceptor sewers to the STP. [40]

69. COMMENT: Regarding Part IV.F.1.h, NHSA cannot ensure that basement backups and sewage overflows will not happen "at all times" as emergency conditions cannot be controlled. As succinctly stated by EPA, "[e]ven municipal collection systems that are operated in an exemplary fashion may experience unauthorized discharges under exceptional circumstances." 75 Fed. Reg. 30,395, 30,400 (June 1, 2010). This is not an attainable level of operation and it negates the bypass rule provisions specified in state and federal law which provide protection for events beyond the "reasonable" control of the Authority. Furthermore, the National CSO Policy recognizes that CSOs will occur pending implementation of the LTCP and that, under the presumption approach, CSOs may continue. As CSOs includes sewage, Section F.1.h.1 is inconsistent with the National CSO Policy and applicable law. It should be removed. [25]

RESPONSE 64-69: In Part IV.F.1.j (formerly Part IV.F.1.h) the word "ensure" is included in the following permit conditions:

"j~~h~~.At a minimum, the SOPs shall contain detailed instructions for system operators, 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.~~ for the following items:

i. Ensure that the entire collection system owned/operated by the permittee that conveys flows to the treatment works functions at all times in such a way as to not result in sewage overflows 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. Ensure that the storage and conveyance of combined sewage to the STP is maximized in accordance with Sections F.2 and F.4.

iii. Ensure that the discharges from SIUs contributing to the CSOs are minimized to the greatest extent practicable in accordance Section F.3.

iv. Ensure there will be no dry weather overflows from any CSO in accordance with Section F.5.

…

vi. Ensure the solids/floatables appurtenances 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."

The word "ensure", is used in EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995. These provisions apply to the level of development and goals of the SOPs, however implementation is directed by Part IV.F.1.e. Nothing in this section is intended to foreclose defenses available to the permittees under New Jersey N.J.S.A. 58:10A-10.2.. Note that each of these requirements references another part of the permit for more specific details. The Department maintains that the use of the word "ensure" is appropriate.

Regarding the use of the phrase "at all times" in Part IV.F.1.j.i, the Department agrees that use of this term may not be appropriate since the condition may not be achievable under emergency conditions. The Department has modified this language as follows:

"i. Ensure that the entire collection system owned/operated by the permittee that conveys flows to the treatment works functions ~~at all times~~ in such a way as to not result in sewage overflows <u>(except from designated CSO outfalls)</u> 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."

The Department maintains that the risk of upstream (street, basement, and other public/private areas) flooding increases with the lack of or improper maintenance in the CSS highlighting the importance of proper SOPs. Not only are these upstream discharges illegal, they are also hazardous to human health and safety. In cases where CSS maintenance has been neglected, where there are blockages or other hydraulic bottlenecks, or where excess capacity is available, corrective action may provide significant improvements in CSO control. While this revision has been incorporated to Part IV.F.1.j.i, the Department maintains that its intent is still clear. Please refer to **<u>RESPONSE 73-78</u>** of Section C of the Response to Comments document for revisions to Part IV.F.1.j.iii.

Regarding the comment that the City of Paterson "cannot 'ensure that the entire collection system ….functions at all times in such a way as to not result in sewage overflows' due to capacity limitations in the interceptor sewers to the POTW", the Department has included language to the permit to clarify that the word "overflows" in this section (Part IV CSM Section F.1.j.i.) of the permit is not referring to the City of Paterson's CSO discharges from its

authorized outfalls during wet weather periods, but rather refers to unauthorized discharges of combined sewage to "basements, streets and other public and private areas."

This change affects Part IV.F.1.j and Part IV.F.1.j.i of the Final permits.

70. COMMENT: Delete the phrase "basements, streets, and other public and private areas" from Part IV.F.1.h.i. These areas are not discharges to waters of the United States and therefore are not the proper subject of a NJPDES Permit. [20] [29] [32] [35] [40] [42] [44]

RESPONSE 70: Under the TWA Regulations, N.J.A.C. 7:14A-22.1, sewerage facilities must be managed to prevent any overflows of the conveyance system. As explained in **RESPONSE 169** of Section D of this Response to Comments document, under the WPCA, discharges into the waters of the state or onto land or into wells into which the pollutant might flow or drain into state waters are prohibited. Since discharges to streets and basements are symptomatic of an improperly operated treatment works; are unauthorized discharges; and have the potential to reach the waters of the state, the Department has the authority to prohibit such overflows.

Therefore, the Department does not agree that the phrase "basements, streets and other public and private areas" should be deleted from Part IV.F.1.j.i (formerly Part IV.F.1.h.i). This language is also consistent with EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995, where it is stated that, "Possible modifications should be analyzed to ensure that they will not cause other problems such as street or basement flooding." The permittees need to balance the benefits of maximizing the collection system for storage against the risks of upstream (street, basement) flooding. Furthermore, the application of measures to expand storage capacity in the collection will increase the O&M requirements.

No additional changes have been made to the Final permit(s) as a result of this comment.

71. COMMENT: In Part IV.F.1.h.ii, add the phrase "through components of the system owned/operated by the permittee," since NBMUA owns and operates very few components that would enable it to maximize storage and conveyance to the STP (which it also does not own). [33]

72. COMMENT: In Part IV.F.1.h.ii, add the phrase "through components of the system owned/operated by the permittee," since NBMUA owns and operates very few components that would enable it to maximize storage and conveyance to the STP. [34]

RESPONSE 71-72: The Department has not added the suggested phrase to this permit condition since Part IV.F.1.j.ii (formerly Part IV.F.1.h.ii) is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit conditions. Note that the term owned/operated by the permittee" is already included in Part IV.F.1.j where Part IV.F.1.j.ii is a subset of that condition. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating of STP infrastructure.

No changes have been made to the Final permit(s) as a result of these comments.

73. COMMENT: Part IV.F.1.h.iii requires the permittee to ensure "SIU contributions to the CSOs are minimized to the greatest extent practicable…" First, this is not a defined standard under the National CSO Policy and leaves broad enforcement discretion to find activities and limit them. Second, the Department, not the permittee, runs the pretreatment program requirements. The Fact Sheets recognize that "only delegated local agencies are authorized to review and modify pretreatment requirements" and that "[s]ince the permittee is not a delegated local agency, it is not authorized to review and modify pretreatment requirements." Therefore, Part IV.F.1.h.ii should specifically reference that the Department is implementing this program and that any pollutant reduction actions would be taken by the Department. [9] [25]

74. COMMENT: Delete this section in its entirety and substitute "Assure CSO impacts are minimized." (CSO Policy II.B.3) [20] [32] [35] [40] [42] [44]

75. COMMENT: Change "discharges" to "impacts" to be consistent with National EPA Policy II.B.2. [28] [31]

76. COMMENT: Remove this paragraph, as SIUs within the Woodcliff Area CSS are controlled by PVSC, not NBMUA. [33]

77. COMMENT: Remove this paragraph, as SIUs within the Woodcliff Area CSS are controlled by the Department, not NBMUA. [34]

78. COMMENT: PVSC requests that the phrase "greatest extent practicable" be deleted from its Individual NJPDES permit, including use of this term in Part IV.F.1.h.iii. This phrase is not a standard established by the National CSO Policy, nor is it defined, leaving broad discretion to interpretation by enforcement. PVSC requests that the Department revise Part IV.F.1.h.iii and Part IV.F.3 to be consistent with EPA's Guidance for NMCs which states that "...minimum control should not require additional effort unless CSS characterization and modeling indicate that a pollutant from a nondomestic source is causing a specific health, water quality, or environmental problem." [42]

RESPONSE 73-78: The Department has revisited this permit condition at Part IV.F.1.j.iii (formerly Part IV.F.1.h.iii) and agrees that changes in content and format are appropriate where the revised permit condition is as follows:

> "iii. Ensure that the impacts ~~discharges~~ from SIUs contributing to the CSOs are minimized ~~to the greatest extent practicable~~ in accordance Section F.3."

The permittees who own/operate the CSO outfall(s) are expected to ensure that the impacts from SIUs contributing to the CSOs are minimized in accordance with Section F.3. Permittees without approved pretreatment programs should coordinate this effort with the receiving STP as required by N.J.S.A. 58:11-53(b).

Additional information on SIUs is available at www.state.nj.us/dep/dwq/sius.htm

For additional information regarding NMC #3, please refer to **RESPONSE 154-159**; **RESPONSE 160-162** and **RESPONSE 163-166** in Section C of the Response to Comments document. Please refer to **RESPONSE 99-100** in Section A of the Response to Comments document.

This change affects Part IV.F.1.j.iii of the Final permits..

79. COMMENT: Regarding Part IV.F.1.h.iv, while the City of Paterson may operate and maintain the collection system and CSO facilities to ensure that there will be no dry weather overflows, the majority of the CSO regulators are operated or owned by PVSC. Therefore the City cannot "ensure" that there will be no dry weather overflows resulting from problems within the regulator structures that they do not own, operate or maintain. A permittee should not be held responsible for non-compliance that is the result of systems outside their control.

Wording should be revised to read: "Ensure there will be no dry weather overflows that result from any portion of the collection system owned and operated by the permittee from any CSO in accordance with Section F.5." [40]

80. COMMENT: Change Part IV.F.1.h.iv to read: "Ensure that Section F.5 of this Permit is satisfied relative to dry weather overflows." [35]

RESPONSE 79-80: Part IV.F.1.h.iv has been renumbered as Part IV.F.1.j.iv. The Department maintains that the City of Paterson is responsible for any DWOs from any CSO outfall that they own/operate. This could include discharges resulting from malfunctioning CSO regulators. It is the responsibility of the City of Paterson to follow up with the owner of the regulator to rectify any malfunctioning equipment. Please refer to **RESPONSE 187** of Section C of the Response to Comments document.

Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of these comments.

81. COMMENT: PVSC requests that Part IV.F.1.h.iv, Part IV.F.1.h.vi and Part IV.F.1.h.xii be deleted from its Individual NJPDES Permit. PVSC does not own or operate any CSO outfalls, S/F facilities or the local collection systems and therefore cannot prioritize I/I reduction strategies for its contributing municipalities. PVSC requests that "DWOs" be deleted from Part IV.F.1.h.v as PVSC does not own or operate any CSOs. [42]

JMEUC requests that Part IV.F.1.h.i, Part IV.F.1.h.iv and Part IV.F.1.h.v should be deleted from its Individual NJPDES Permit as they are inapplicable to JMEUC. JMEUC does not own or operate such facilities other than approximately 1100 feet that carries the combined flow of Elizabeth City to the JMEUC treatment facility. [9]

RESPONSE 81: Part IV.F.1.j (formerly Part IV.F.1.h) is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit conditions. Note that the term "owned/operated by the permittee" is already included in Part IV.F.1.j of which the four referenced permit conditions are a subset. Please refer to **RESPONSE 187** in Section C of the Response to Comments document regarding additional information on DWOs. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of this comment.

82. COMMENT: Part IV.F.1.h.v does not pertain to the BCUA and should be eliminated from the permit since they are not responsible for the combined sewer collection system. [21]

83. COMMENT: Regarding Part IV.F.1.h.v, add the phrase "of components of the system owned/operated by the permittee," since visual inspections would be limited to components that are owned or operated by NBMUA. [33] [34]

RESPONSE 82-83: Part IV.F.1.j.v (formerly Part IV.F.1.h.v) requires the permittee to include SOPs in their O&M Program and corresponding Manual to address the following:

> "v. Conduct a visual inspection program of sufficient scope and frequency of the CSS to provide reasonable assurance that unpermitted discharges, obstructions, damage, and DWOs will be discovered."

Part IV.F.1.h.v is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit condition. Note that the term "owned/operated by the permittee" is already included in Part IV.F.1.j, of which Part IV.F.1.j.v is a subset. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of these comments.

84. COMMENT: Regarding Part IV.F.1.h.vi, the "no obstruction" language is overbroad and the timeframe should be changed to "as soon as necessary and practicable given the severity of the circumstances encountered." [25]

RESPONSE 84: Part IV.F.1.j.vi (formerly Part IV.F.1.h.vi) requires the permittee to include SOPs in their O&M Program and corresponding Manual to address the following:

> "vi. Ensure the solids/floatables appurtenances 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."

The Department's intent for this permit requirement is to emphasize the need for permittees to be proactive in checking their S/F removal facilities before forecasted storms to ensure that their screens are cleaned and netting facilities have adequate capacity to capture debris in the event of a CSO discharge as the result of wet weather conditions. Additionally, the Department wants to emphasize the importance that the permittees check their S/F removal facilities during, and at the completion of, a discharge occurrence. This is necessary to prevent clogged screens and/or clogged netting facilities that may cause unplanned discharges at other overflow points, or produce backups in the CSS resulting in street and basement flooding. Regular and timely maintenance of the S/F appurtenances, such as cleaning of screens, changing nets, and the proper disposal of collected materials is critical for the successful implementation of this sixth minimum control.

The Department maintains that the language at Part IV.F.1.j.vi is clear as written and is consistent with the NMCs and EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995.

No changes have been made to the Final permit(s) as a result of this comment.

85. COMMENT: Part IV.F.1.h.vii requires prevention of intrusions upstream of the regulators due to high tides and/or receiving water flooding. Tide gates are used to prevent the flooding of sewer systems due to water levels in the receiving waters rising higher than the inverts of the outfall sewers. Tides gates are mechanical devices subject to limitations on their efficiency to prevent intrusion into the sewer system. Even a perfectly maintained and adjusted tide gate may exhibit some minor leakage. Tide gate manufactures include an allowable amount of leakage in their specification. Therefore, we recommend the language be changed to "Prevent the intrusion, to the maximum extent practicable, upstream of the regulators…" [6] [15] [20] [32] [33] [34] [35] [40] [42] [44]

RESPONSE 85: The Department acknowledges that a properly designed, properly installed, and properly maintained tide gate may exhibit some minor seepage of river water past a closed tide gate.

The Department's intent for this requirement is for permittees to make a specific commitment to properly maintain their tide gates. This generally includes the assignment of sufficient personnel and equipment for timely inspection and the performance of timely repairs so that tide gates will function in accordance with manufacturer's specifications. To clarify the Department's intent, Part IV.F.1.j.vii (formerly Part IV.F.1.h.vii) has been modified as follows:

> "vii. 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 <u>through proper operation and maintenance.</u>"

The Department's intent for this requirement is for permittees to properly maintain their tide gates. It is understood that minimal leakage may occur; however, leakage to the extent that infiltration enters the collection system past the regulator is not acceptable and needs to be addressed.

Pursuant to EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003) dated May 1995, tide gates are considered to be one of the most critical elements of a CSS and that owners/operators of tide gates need to demonstrate that these components receive an appropriate amount of attention through a comprehensive O&M program. Frequent inspection, regular maintenance, and the timely repair of tide gates, are cost effective ways to improve the control of CSOs. Tide gates that fail to close properly because of debris or improper preventive/corrective maintenance can allow significant volumes of water to enter into the CSS; thereby, occupying system storage and conveyance capacity that would otherwise be available during wet weather periods, and possibly causing dry weather flows to increase sufficiently to produce DWOs at downstream locations.

This change affects Part IV.F.1.j.vii of the Final permits.

86. COMMENT: PVSC requests that "catch basin" be deleted from Part IV.F.1.h.viii as PVSC does not own or operate catch basins. [42]

87. COMMENT: Regarding Part IV.F.1.h.viii, add the phrase "for components of the system owned/operated by the permittee," since NBMUA's cleaning schedule would be limited to components that are owned or operated by NBMUA. [33] [34]

88. COMMENT: Sewers and catch basins should not be cleaned unless necessary, and to do so is inefficient and a waste of funding. This section should be changed to read: "Provide a schedule for the inspection of each sewer pipe segment and catch basin with cleaning to be performed on that pipe segment or basin as necessary." [35]

RESPONSE 86-88: Part IV.F.1.j.viii (formerly Part IV.F.1.h.viii) requires the permittee to include SOPs in their O&M Program and corresponding Manual to address the following:

> "viii. Provide a gravity sewer and catch basin inspection schedule and clean as necessary. ~~cleaning schedule~~."

Part IV.F.1.j.viii is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit condition. Note that the term "owned/operated by the permittee" is already included in Part IV.F.1.j, of which Part IV.F.1.j.viii is a subset of that condition. If the permittee does not own/operate the gravity sewer or catch basins(s), they can indicate this in the O&M Program and corresponding Manual. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

This change affects Part IV.F.1.j.viii of the Final permits.

89. COMMENT: In Part IV.F.1.h.ix, delete the phrase "including to basements, streets, and other public and private areas." These are not discharges to waters of the United States and therefore are not the proper subject of a NJPDES Permit. [29] [35]

90. COMMENT: PVSC requests that overflows that do not reach receiving waters (e.g., "basements, streets and other public and private areas") be deleted from its Individual NJPDES Permit as they are not the subject of a NJPDES permit. [42]

RESPONSE 89-90: Part IV.F.1.j ix (formerly Part IV.F.1.h.ix) requires the permittee to include SOPs in their O&M Program and corresponding Manual to address the following:

> "ix 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."

Please refer to **RESPONSE 70** in Section C of the Response to Comments document which discusses the Department's authority to require this condition as part of the O&M requirements.

No changes have been made to the Final permit(s) as a result of these comments.

91. COMMENT: Remove Part IV.F.1.h.ix as NBMUA does not own the collection system, and North Bergen Township is the recipient for residential complaints regarding its sewer system in the Central Area CSS. [33]

92. COMMENT: Remove Part IV.F.1.h.ix as NBMUA does not own the collection system, and North Bergen Township and the Town of Guttenberg are the recipients for residential complaints regarding their sewer systems in the Woodcliff STP service area. [34]

RESPONSE 91-92: Part IV.F.1.j.ix (formerly Part IV.F.1.h.ix) is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit conditions. Note that the term "owned/operated by the permittee" is already included in Part IV.F.1.j, where Part IV.F.1.j.ix is a subset of that condition.

No additional changes have been made to the Final permit(s) as a result of these comments.

93. COMMENT: Part IV.F.1.h.x requires the permittee to remove, within "one (1) week of the permittee becoming aware, any obstructions due to debris, Fats, Oils, and Greases, and sediment buildup, or other foreign materials." First, the "any obstruction" language is overbroad. Second, the time frame should be "as soon as necessary and practicable given the severity of the circumstances encountered." Third, the permittee cannot reasonably ensure that obstructions will not happen for any future CSO discharges given the highly variable nature of CSO discharge occurrences and the multitude of locations where an obstruction may arise. [9] [25]

94. COMMENT: Delete "within one (1) week" and replace it with "as soon as practicable." Which statute or regulation sets the time for removal of "any" obstruction at "within one (1) week"? [20] [40] [42] [44]

95. COMMENT: PVSC requests that the phrase "[r]emove within one (1) week" be revised to "as soon as necessary and practicable given the severity of the circumstances encountered and other

responsibilities." PVSC also requests that "any" be deleted from this Item as it is overly broad. [42]

96. COMMENT: Delete "within one (1) week" and replace it with "as soon as practicable." Which statute or regulation sets the time for removal of "any" obstruction at "within one (1) week"? [32] [35]

RESPONSE 93-96: Part IV.F.1.j.x (formerly Part IV.F.1.h.x) requires the permittee to include SOPs in their O&M Program and corresponding Manual to address the following:

> "x. Remove within one (1) week of the permittee becoming aware, any 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. Remove any other obstructions due to debris, Fats, Oils and Greases, and sediment buildup, or other foreign materials in the collection system owned/operated by the permittee as soon as practicable."

Several commenters stated that the Department should delete "within one (1) week" and replace it with alternate language. The Department acknowledges that not all obstructions impose the same impacts; therefore, the Department has incorporated the changes indicated above. The Department's intent for this language is for obstructions causing overflows to be addressed immediately whereas other obstruction may be addressed as soon as practicable and will serve to require permittees to prioritize the removal of any blockages and/or obstructions from their CSS.

This change affects Part IV.F.1.j.x of the Final permits.

97. COMMENT: Regarding Part IV.F.1.h.x, is the permittee required to report all obstructions and removals to the DEP Hot Line as a non-compliance? Similarly, are obstructions and removals required to be reported in Progress Reports or on MRFs? [35]

RESPONSE 97: Regarding Part IV.F.1.j.x (formerly Part IV.F.1.h.x), permittees are not required to report obstructions and removals on MRFs. However, permittees are required to retain records associated with the removal and disposal of this material in accordance with the CSO Recordkeeping Requirements (Part IV. B.1) and shall include this information as part of their CSO Progress Report Submittal Requirements (Part IV.D.4).

No additional changes have been made to the Final permit(s) as a result of this comment.

98. COMMENT: Remove Part IV.F.1.h.x as NBMUA does not own the collection system within North Bergen Township in the Central Area CSS. [33]

99. COMMENT: Remove Part IV.F.1.h.x as NBMUA does not own the collection systems within North Bergen Township or the Town of Guttenberg in the Woodcliff STP service area. [34]

100. COMMENT: Because the permittee does not own or operate a CSS, delete Part IV.F.1.h.i through Part IV.F.1.h.x in their entirety. [15]

RESPONSE 98-100: Part IV.F.1.j.x (formerly Part IV.F.1.h.x) is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit conditions. Note that the term "owned/operated by the permittee" is already included in Part IV.F.j where Part IV.F.1.j.x is a subset of that condition.

No additional changes have been made to the Final permit(s) as a result of these comments.

101. COMMENT: Part IV.F.1.h.xi requires "immediate corrective action(s) to repair damage and/or structural deterioration, address unpermitted discharges, and eliminate DWOs …" This language is overbroad and is unachievable as currently written. It is always necessary to plan and fund significant sewer improvements. They cannot occur immediately. Moreover, the level of damage or deterioration is not qualified and this would keep us in perennial non-compliance as all sewer systems suffer damage and deterioration as part of their operation. [25]

102. COMMENT: Regarding Part IV.F.1.h.xi, delete "immediate" and replace it with "timely." While "immediate corrective action" may be a worthwhile goal, it is not always possible for every circumstance outlined in this section. [20] [32] [33] [34] [35] [40] [42] [44]

103. COMMENT: Delete the word "immediate" in Part IV.F.1.h.xi. Operators must be given the ability to respond in a manner and in a priority that will provide the best environmental benefit. Immediate corrective action to all the items listed in F.1.h.xi does not recognize the need for operators to respond in a way that will provide the most benefit. [28] [31]

104. COMMENT: While "immediate corrective action" may be a worthwhile goal, it is not always possible for every circumstance outlined in this section. Part IV.F.1.h.xi should reflect that reality. [29]

105. COMMENT: PVSC requests that the words "immediate" and "DWOs" be deleted from Part IV.F.1.h.xi. Corrective action for significant infrastructure issues, as indicated by federal and state consent decrees, can take 20 or more years. Moreover, a large system needs to prioritize its response. Further, PVSC does not own or operate any CSO outfalls. [42]

106. COMMENT: Remove Part IV.F.1.h.xi since NBMUA is not responsible for corrective actions relating to North Bergen Township's collection system that are located in the Central Area CSS and it does not own. NBMUA could be required in this section to notify North Bergen Township in the event that dry weather overflows are observed. [33]

107. COMMENT: Remove Part IV.F.1.h.xi since NBMUA is not responsible for corrective actions relating to a collection system it does not own in the Woodcliff STP service area. NBMUA could be required in this section to notify North Bergen Township and the Town of Guttenberg in the event that dry weather overflows are observed. [34]

RESPONSE 101-107: The Department's intent regarding this requirement is for permittees to take immediate steps to address the situations listed in Part IV.F.1.j.xi (formerly Part

IV.F.1.h.xi). As a result, this permit condition has been revised to clarify the Department's intent where this condition requires the permittee to include SOPs in their O&M Program and corresponding Manual. For instance, "action(s)"could consist of initiating the process of investigating, identifying, planning and correcting a problem. The Department understands that different circumstances will require different levels of effort, and that some may take more time to begin corrective actions than others. This permit condition is revised as follows:

"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."

Regarding the comment that "It is always necessary to plan and fund significant sewer improvements," the Department agrees with this statement as it pertains to planning and budgeting for future capital projects. Part IV. F.1.k requires permittees to do so through incorporation of an Asset Management Plan as part of an overall O&M strategy. However, to address the circumstances of repairing/replacing structurally damaged and/or deteriorated sewer pipe, the permittee needs to have the financial means available to be able to address POTW related emergencies, and an Emergency Plan to provide for, to the fullest extent possible, uninterrupted STP operation during emergency conditions as required by Part IV.F.1.l of the permit. This is required pursuant to N.J.A.C. 7:14A-6.12(d)6.

Regarding the contention by PVSC that the word DWOs be deleted from this section since "PVSC does not own or operate CSOs," the Department disagrees. Although PVSC does not own or operate CSOs, PVSC does have ownership or operational responsibility for some components of the CSS, which may include interceptor sewers, regulators, tide gates, pumping stations, etc. Please refer to **RESPONSE 187** of Section C of the Response to Comments document regarding revised language for DWOs for PVSC. Please refer to **RESPONSE 26–42** of Section A of the Response to Comments document for further information regarding responsibilities related to owning/operating POTW infrastructure.

This change affects Part IV.F.1.j.xi of the Final permits.

108. COMMENT: Part IV.F.1.h.xii requires the permittee to provide for ongoing I/I reduction strategies. There is no requirement in Federal or State regulations to remove I/I; rather, the only requirement is to remove excessive I/I, as defined under N.J.A.C. 7:14A-1.2. That definition provides that "excessive inflow/infiltration means the quantities of infiltration/inflow (I/I) which can be economically eliminated from a sewer system as determined in a cost effectiveness analysis that compares the cost for correcting the I/I conditions to the total costs for transportation and treatment of the I/I." Accordingly, all references in this permit should be changed from "I/I" to "excessive I/I." [42] [44]

109. COMMENT: Paragraph F.1.h.xii makes reference to ongoing reduction of I/I. This should be changed to "Excessive Infiltration and Inflow (I/I)" as defined in N.J.A.C. 7:14A-1.2 which addresses quantities of I/I which can be economically eliminated from a sewer system. [28] [31]

110. COMMENT: Insert "excessive" between "ongoing" and "infiltration." [15] [20] [32] [33] [34] [35] [40] [42] [44]

RESPONSE 108-110: As described in **RESPONSE 45-52** of Section C of the Response to Comments document, the Department agrees that changes are appropriate and has modified Part IV.F.1.j.xii (formerly Part IV.F.1.h.xii) as follows:

"xii. Provide for ongoing ~~infiltration and inflow (~~ I/I ~~)~~ reduction strategies to meet the definition of non-excessive infiltration (in combined and separately sewered areas) and non-excessive inflow (in separately sewered areas) as defined in N.J.A.C. 7:14A-1.2 through the identification of I/I sources and the prioritization and implementation of I/I reduction projects."

This change affects Part IV.F.1.j.xii of the Final permits.

111. COMMENT: Remove Part IV.F.1.h.xii. I/I reduction strategies and their implementation are the responsibility of North Bergen Township, which owns the collection system in the Central Area CSS. [33]

112. COMMENT: Remove Part IV.F.1.h.xii. I/I reduction strategies and their implementation are the responsibility of North Bergen Township and the Town of Guttenberg, which own the collection systems in the Woodcliff STP service area. [34]

RESPONSE 111-112: Part IV.F.1.j.xii (formerly Part IV.F.1.h.xii) is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit conditions. Note that the term owned/operated by the permittee" is already included in Part IV.F.1.j where Part IV.F.1.j.xii is a subset of that condition. Please refer to **RESPONSE 108-110** of Section C of the Response to Comments document regarding revisions to this permit condition. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of these comments.

113. COMMENT: Newark uses contractors to perform many of these CSO related O&M functions. Newark is unaware of what equipment the contractor owns or uses in performance of his contract. How will this be addressed/satisfied under this Permit Section? Should just Newark equipment be listed? [35]

RESPONSE 113: Part IV.F.1.j.xiii (formerly Part IV.F.1.h.xiii) requires the permittee to include SOPs in their O&M Program and corresponding Manual to address the following:

"xiii. Identify the equipment currently owned, operated and maintained for investigating and maintaining the CSS and, at a minimum, reference the appropriate equipment manuals."

Regardless of whether a permittee uses its own employees or contractors/consultants to perform the CSO related O&M functions under this permit, the permittee is required to include a SOP in its O&M Program and corresponding Manual to address this condition. If the permittee chooses to assign portions of its permit responsibilities to a third party, it is the permittee's responsibility to ensure that those third parties comply with the permit and the permittee will be held responsible if they do not. Please refer to **RESPONSE 9** in Section C of the Response to Comments document for additional information regarding this issue.

No additional changes have been made to the Final permit(s) as a result of this comment.

114. COMMENT: Regarding the requirement in Part IV.F.1.h which concerns maximizing wet weather flows, practically anything can be accomplished at a cost, and thus the requirement to maximize can be interpreted in different ways. This requirement should be revised to say either "Provide procedures whereby wet weather flows to the STP are maximized to the extent reasonably practical using existing infrastructure for conveyance and treatment….", "Provide procedures whereby wet weather flows are maximized to the extent practical using existing infrastructure for conveyance…", or "Provide procedures whereby wet weather flows are maximized to the extent practical using existing infrastructure for conveyance…" The key principles of the National CSO Policy involve the use of cost-effective means and consideration of a community's financial capability. 59 Fed. Reg. 18689 (April 19, 1994). The permit should reflect such key principles. [19] [21] [25] [26]

115. COMMENT: Add the phrase "to the extent practical using existing infrastructure" between "maximized" and "conveyance to the STP." [42] [44]

RESPONSE 114-115: Part IV.F.1.j.xiv (formerly Part IV.F.1.h.xiv) requires the permittee to include SOPs in their O&M Program and corresponding Manual to address the following:

> "xiv. Provide procedures whereby wet weather flows are maximized for conveyance to the STP and discharges from CSOs are minimized."

This provision requires the permittee to demonstrate compliance with NMC #4 and does not create any additional substantive requirements. The Department maintains that the permit condition as written is appropriate. Please refer to **RESPONSE 175** and **RESPONSE 180** in Section C of the Response to Comments document regarding modifications to the permit condition in NMC #4, *Maximization of Flow to the POTW for Treatment*, of this document.

No additional changes have been made to the Final permit(s) as a result of these comments.

116. COMMENT: Wet weather flow from Newark to the PVSC is controlled directly or indirectly by PVSC. The maximization of wet weather flow to the STP is not under the control of Newark and therefore should be removed from its permit. [35]

RESPONSE 116: As stated in **RESPONSE 114-115** of Section C of the Response to Comments document, the language in this section of the permit represents the fourth of the

NMCs, *Maximization of Flow to the POTW for Treatment*. As such, regarding the components that the permittee owns/operates, the permittee is required pursuant to the National CSO Policy and N.J.A.C. 7:14A-11 (Appendix C) to maximize the conveyance of wet weather flows to the STP. This will include the implementation of proper O&M and potential modifications to its existing CSS in order to enable as much wet weather flow as possible to reach the STP.

No changes have been made to the Final permit(s) as a result of this comment.

117. COMMENT: PVSC requests that "and discharges from CSOs are minimized" be deleted from Part IV.F.1.h.xiv as PVSC does not own or operate any CSO outfalls. [42]

RESPONSE 117: Part IV.F.1.j.xiv (formerly Part IV.F.1.h.xiv) is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit conditions. Note that the term owned/operated by the permittee" is already included in Part IV.F.1.h, where Part IV.F.1.h.xiv is a subset of that condition. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of this comment.

118. COMMENT: Regarding Part IV.F.1.h.xiv, the phrase "and discharges from CSOs are minimized" does not appear in the NMCs section of the National CSO Policy or the Department's regulations. Accordingly, this phrase should be deleted. [42] [44]

RESPONSE 118: This permit condition has been renumbered as Part IV.F.1.j.xiv. The Department maintains that this phrase is appropriate and is consistent with EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003) dated May 1995. As stated in this guidance document, the objective of the fourth minimum control, *Maximization of Flow to the POTW for Treatment*, "is to reduce the magnitude, frequency, and duration of CSOs that flow untreated into receiving waters." Although the phrase "and discharges from CSOs are minimized" does not appear exactly the same in the National CSO Policy or in N.J.A.C. 7:14A-11, Appendix C, it is clear from the language in the EPA guidance document that the intent of this fourth minimum control is for the permittees to maximize as much wet weather flow as possible to reach the STP, and in doing so, minimizing CSO discharges.

Part IV.F.1.j.xiv is also consistent with one of the three objectives of the National Combined Sewer Overflow Control Strategy issued on August 10, 1989 (54 Federal Register 37370), which is to "minimize the impacts of CSOs on water quality, aquatic biota, and human health from CSOs."

No additional changes have been made to the Final permit(s) as a result of this comment.

119. COMMENT: An Asset Management Plan is a complex and lengthy document. Therefore, delete "quarterly Progress Report" and insert "second annual report of the O&M Program and Manual" or "EDP +24 months." [20] [29] [32] [33] [34] [40] [42] [44]

120. COMMENT: An Asset Management Plan is a complex and lengthy document and additional time is requested. PVSC suggests deletion of "quarterly Progress Report" and insert "update of the O&M Manual." [9] [15]

121. COMMENT: This section requires NHSA to develop an Asset Management Plan within "the first quarterly Progress Report." The timeframe stated is too short since the program must be designed to fit the specific circumstances encountered. This provision should be revised to EDP +55 months. [25]

122. COMMENT: An Asset Management Plan is a complex and lengthy document. Therefore, delete "quarterly Progress Report" and replace it with "update of the O&M Manual – EDP +24 months." This "Plan" is not and should not be a report but be an ever-evolving process for efficient O&M and system renewal. This Plan, after some period of time, would also result in the modification of inspections, cleaning and maintenance of CSS components such as regulators, S/F control, sewer pipe segments and catch basins. The permit should allow for such modifications. [35]

123. COMMENT: This paragraph requires an Asset Management Plan be developed by the first quarterly Progress Report. This cannot be done until the sewer map required in Paragraph D 2.b. is complete, as this will inventory the assets. This map will not be completed until EDP +18 months. While some work on the Asset Management Plan can be completed concurrent with the survey and inspection of assets, the Asset Management Plan cannot be completed until EDP +24 months. Please change this milestone to EDP +24 months. [28] [31]

124. COMMENT: PVSC's Computerized Maintenance Management System (CMMS) was developed over many years. The Department's expectations of permittees developing Asset Management Plans within 90 days are unrealistic. PVSC requests that the Department revise the enforceable deadline for having an Asset Management Plan to EDP +12 months. PVSC also requests that "as prepared and submitted to Department of Community Affairs" be deleted from Part IV.F.1.i. PVSC is not subject to oversight by the DCA and therefore does not submit its annual operating budget to the DCA. [42]

125. COMMENT: The permittee cannot prove that its Asset Management Plan can "ensure" compliance. It is requested that the word "ensure" shall be modified to "demonstrate." [21]

RESPONSE 119-125: The Department has revisited this permit condition and has determined that changes in content are appropriate and that additional time is warranted for preparation of the Asset Management Plan, as indicated in the CSO Submittal Summary. As a result, Part IV.F.1.k (formerly Part IV.F.1.i) has been revised as follows:

"k~~i~~. The permittee shall incorporate an Asset Management Plan as part of the overall O&M strategy. This plan shall include an infrastructure inventory with infrastructure

repair/replacement needs listed and scheduled according to priority/criticality, that demonstrates ~~ensures~~ 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) allocated in the permittee's budget. This information shall be included in the permittee's budget as prepared and submitted to Department of Community Affairs, if appropriate. The Asset Management Plan shall be completed no later than EDP+12 months ~~at the time of the first quarterly Progress Report~~."

The Asset Management Plan is a critical component of the O&M Manual for the implementation of the first of the NMCs, which is Proper Operation and Regular Maintenance of the CSS. Asset management planning consists of developing a plan to reduce costs while increasing the efficiency and the reliability of the assets. An asset management plan incorporates detailed asset inventories, operation and maintenance tasks and long-range financial planning to ensure that annual revenue reserves and reinvestment are sufficient to facilitate long-term viability of the system. Please refer to the Department's *Asset Management Guidance and Best Practice* available at http://www.nj.gov/dep/watersupply/pdf/guidance-amp.pdf.

The Department agrees with the commenter that having a proper asset management program in conformance with the requirements of Part IV.F.1.k. of the permit does not necessarily guarantee that compliance would be achieved and that a NJPDES permit violation can potentially occur that is not the result of improper asset management. The revised permit language above should serve to address this concern.

Regarding the comment regarding timing concerns for the mapping and inventory in relation to the asset management requirement, note that the GIS mapping requirement is due at EDP+6 months which does precede the compliance date for the Asset Management requirement above. Please refer to **RESPONSE 102-105** of Section B of the Response to Comments document regarding GIS requirements. Please refer to **RESPONSE 107-117** of Section B of the Response to Comments document regarding Part IV.D.2.b which concerns mapping for the combined and separate sewers. Please refer to **RESPONSE 14-22** of Section C of the Response to Comments document for requirement pertaining to the characterization spreadsheet as part of the O&M requirements.

Regarding submission of the permittee's budget to the DCA, because PVSC is an STP and not a municipality, the Department agrees that submission to the DCA may not be appropriate for PVSC, as well as for other STP permits. As a result, the Department has inserted "if appropriate" as indicated above.

This change affects Part IV.F.1.k of the Final permits.

126. COMMENT: The permittee does not own or operate a CSS. Therefore, delete Part IV.F.1.i concerning Asset Management in its entirety. [15]

RESPONSE 126: The Department maintains that inclusion of Part IV.F.1.k regarding Asset Management (formerly Part IV.F.1.i) is appropriate. Part IV.F.1.k is applicable to the extent that the permittee owns/operates that portion of the infrastructure that is the subject of the permit condition. Please refer to **RESPONSE 119-125** in Section C of the Response to Comments document for revisions to the permit condition. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No additional changes have been made to the Final permit(s) as a result of this comment.

127. COMMENT: Regarding Part IV.F.1.j, note that N.J.A.C. 7:14A-6.12(d) describes the subject matter contained in an Emergency Plan. The regulations do not define an emergency as "extreme weather events (including 100 and 500 year storm events) or extended periods of no power" (e.g. 7 days and 14 days). Emergencies are defined as "Caused by natural disaster, civil disorder, strike, sabotage, faulty maintenance, negligent operation or accident." Please state which Statute, rule, or regulation mandates a 100 or 500 year flood or a 7 or 14 day power outage as part of an Emergency Plan. A flood or a power failure is a subject that belongs in an emergency plan. Specifying the size of those events is properly left to the authors of the emergency plan, as contemplated by the regulation. [20] [29] [32] [33] [34] [35] [40] [42] [44]

128. COMMENT: Part IV.F.1.j indicates that "effective operation of the treatment works" is required under such extreme events (like Super Storm Sandy). It is not apparent what the legal or regulatory basis is for this provision or what the Department believes constitutes "effective operation." Backup power is provided consistent with good engineering practices. However, requirements beyond that do not appear to exist in state or federal law.

Moreover, we question the basis for the 100-year and 500-year storm event standard in the Draft permit. The underlying regulation at N.J.A.C. 7:14A-6.12(d) which addresses emergency plans does not establish a 100-year or 500-year storm standard. It is requested that "ensure" be replaced with "it is impossible to sustain operations under 500-year storm conditions." [9] [25]

129. COMMENT: This paragraph suggests that facilities must operate during 500 year storms and extended periods without power. Following Super Storm Sandy and other similar natural events, many utility organizations realized that taking critical equipment off line during such events allows service to be restored more quickly following the event. This also helps avoid prolonged periods of time when critical equipment is out of service for damage recovery. The requirements of the Draft permit should not override resiliency plans; resiliency plans should be part of the LTCP process.

Please delete the references to the specified conditions of 100 and 500 year storms and power outages of 7 days and 14 days. [28] [31]

RESPONSE 127-129: The Department has revisited this permit condition and has determined that the Emergency Plan does not need to specifically address a 100 year or a 500

year storm nor should it address a 7 or 14 day power outage. The Emergency Plan requirement shall instead address the factors listed under N.J.A.C. 7:14A-6.12(d)3.i and ii and N.J.A.C. 7:14A-23.13(h). Part IV.F.1.l (formerly Part IV.F.1.j) has been modified as follows:

"l~~j~~. The permittee shall also include in the O&M Program and corresponding Manual, an Emergency Plan, 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 services. The Emergency Plan shall include Standard Operating Procedures (SOPs), which ensure the effective operation of the treatment works under emergency conditions, such as extreme weather events ~~(including 100 and 500 year storm events)~~ and extended periods of no power~~, (e.g., 7 days and 14 days)~~."

The Department's regulations at N.J.A.C. 7:14A-6.12(d)3 require permittees to prepare emergency plans "designed to ensure effective operation of the treatment works under emergency conditions." This provision expressly requires a vulnerability analysis to estimate the degree to which the treatment works would be adversely affected by emergency situations (e.g., natural disaster, civil disorder, strike, sabotage, faulty maintenance, negligent operation, or accident) that could be reasonably expected to occur, and to plan for their effects on the operation of the facility (e.g., power supply, communication, equipment, personnel, security, and emergency procedures to be followed).

N.J.A.C. 7:14A-23.13(h) requires STPs to provide an adequate auxiliary source of power capable of maintaining necessary plant functions to ensure compliance with the facility's NJPDES permit requirements. Since the draft CSO permits were issued, the Department has released guidance to assist permittees in developing emergency response plans that comply with these requirements. N.J.A.C. 7:14A-23.10(a)(5) requires that pumping stations have adequate auxiliary power in addition to being protected against flooding. Additionally, adequate provisions must be made for access to the stations during storm events in order to meet these regulatory requirements.

Since the draft CSO permits were issued, the Department has released a variety of guidance documents which should serve to assist permittees in complying with this permit condition. This includes Asset Management Guidance and Best Practices (available at http://www.nj.gov/dep/watersupply/pdf/guidance-amp.pdf); *Emergency Response Preparedness/Planning Guidance and Best Practices* (available at www.state.nj.us/dep/dwq/pdf/guidance_erp.pdf.); *Infrastructure Flood Protection Guidance and Best Practices* (available at http://www.nj.gov/dep/watersupply/pdf/guidance-ifp.pdf); and *Auxiliary Power Guidance and Best Practices* (available at http://www.nj.gov/dep/watersupply/pdf/guidance-ap.pdf).

This change affects Part IV.F.1.l of the Final permits.

130. COMMENT: The Draft permit states that the Emergency Plan shall "ensure the effective operation of the STP under emergency conditions, such as extreme weather events (including 100 and 500 year storm events) and extended periods of no power, (e.g. 7 days and 14 days)."

PVSC has applied to the FEMA for mitigation funding to build a wall around the perimeter of the STP to protect against 100 and 500 year flooding. PVSC has also applied to FEMA for mitigation funding to construct a power plant onsite to be utilized as backup power to PSE&G. A full power plant is necessary to supply sufficient power to maintain operations. The PVSC STP consumes approximately 20 MW of power daily. PSE&G currently supplies power to the PVSC via two independent feeds. Prior to Superstorm Sandy, PVSC only lost power to the facility once, during the Northeast Blackout of 2003. PVSC did, however, lose power as a result of Superstorm Sandy. It is not feasible, nor is it desirable, to utilize emergency generators for backup power for the entire STP. Independent of PVSC's mitigation plans, PSE&G is improving its infrastructure to mitigate against future outages, including, but not limited to, providing PVSC with a third independent power feed to the facility.

If FEMA does not approve funding for PVSC's mitigation projects, it will be impossible for PVSC to comply with this requirement. PVSC cannot elevate its entire STP above the 500 year flood elevation nor can it supply 20MW of backup power via emergency generators for 7 to 14 days. Additionally, PVSC does not have the ability to fund these projects on its own as it does not have a quorum of Commissioners and, instead, is operating under a Gubernatorial Executive Order under which it cannot issue bonds to pay for the capital construction costs. The estimated cost for the floodwall and power plant is $256 million dollars. This would cause an undue burden on PVSC's ratepayers if necessary to fund from its annual operating budget.

In sum, PVSC requests that Part IV.F.1.j be deleted from its Individual NJPDES permit in its entirety. Part IV.F.1.l already addresses Emergency Power and this section requires more than the regulations making it overly stringent and financially burdensome to comply with. [42]

RESPONSE 130: The Department disagrees with the request to remove Part IV.F.1.l. Please refer to the **RESPONSE 127-129** in Section C of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

131. COMMENT: Regarding Part IV.F.1.j, words like “ensure” and “to the maximum extent possible” imply a guarantee of compliance that could never be met with a dynamic system such as combined sewers. The phase “to the extent possible” already indicates an effort to maximize the results. We request that the second and third lines should be modified to read: “The Emergency Plan shall provide for, to the extent reasonably possible, uninterrupted treatment works operation….” The fifth sentence of this section should be modified to read: “The Emergency Plan shall include Standard Operating Procedures (SOPs), which demonstrate the effective operation of the treatment works…” [19] [21] [26]

132. COMMENT: This section states: “The Emergency Plan shall include Standard Operating Procedures (SOPs), which ensure the effective operation….” Under such emergency conditions, it is impossible to “ensure” effective operations as it implies a guarantee of compliance that could never be met with a dynamic system such as combined sewers. Additionally, the second and third lines should be modified to read: “The Emergency Plan shall provide for, to the extent practical, uninterrupted treatment works operation….” [25]

RESPONSE 130-132: Regarding Part IV.F.1.l (formerly Part IV.F.1.j), Emergency Plans must be designed to ensure effective operation of the STP under emergency conditions in accordance with N.J.A.C. 7:14A-6.12(d). The NJPDES regulations at N.J.A.C. 7:14A-6.12(d)iv further require that an emergency plan ensures, to the maximum extent possible, the capability to provide uninterrupted treatment works operation. N.J.A.C. 7:14A-6.12(d) requires that, in emergency situations, the permittee implements the emergency plan to the fullest extent possible. Taken together, the Department believes these regulations justify the Emergency Plan requirements as written.

No additional changes have been made to the Final permit(s) as a result of these comments.

133. COMMENT: N.J.A.C. 7:14A-6.12 requires an emergency operating plan ensuring, to the maximum extent possible, uninterrupted treatment works operation. It does not specify "using in-house and/or contract based services." Therefore, delete the phrase "using in-house and/or contract based services." [20] [29] [32] [35] [40] [42] [44]

RESPONSE 133: The Department has included the phrase "using in-house and/or contract based services" in accordance with the EPA NMCs Guidance. Specifically, Section 2.1.5, Non-Routine Maintenance and Emergency Situations states that the NPDES permitting authority will expect to see that response can be quick, without unnecessary processes and procedures. The guidance further states that emergency protocols should include the names and telephone numbers of employees or others designated to respond to the emergency. The Department maintains that the phrases "employees or others designated to respond to the emergency" along with a response that is "quick, without unnecessary processes and procedures" means that contract based services should already be available and not slowed by any contract negotiations or competition for in demand contractors under these conditions. However, if a permittee is able to provide all of its necessary emergency services quickly on its own, contract based services are not needed. Note that the permit requirement is "in-house ***and/or*** contract based services" (emphasis added). Therefore, the permittee has the latitude to use any combination of in-house and contract based services as necessary.

No changes have been made to the Final permit(s) as a result of this comment.

134. COMMENT: N.J.A.C. 7:14A-6.12(c)(2) states "The operation and maintenance manual shall be amended whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures." Therefore, delete "no less frequently than annually" and substitute "whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operation and maintenance procedures." [20] [29] [32] [35] [40] [42] [44]

135. COMMENT: This section mandates annual O&M plan amendments. This is excessive and this provision should only require annual updates if necessary to ensure proper O&M. [9] [25]

136. COMMENT: PVSC requests that the first sentence be revised as follows: "The permittee shall amend, if necessary as a result of updated information and changes in characterization." [42]

RESPONSE 134-136: The Department has revised Part IV.F.1.m (formerly Part IV.F.1.k) slightly to clarify its intent. The revised condition is stated as follows:

"m~~k~~. The permittee shall amend the O&M Program and Manual on at least an annual frequency ~~no less frequent than annually~~ 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 the submittal requirements in Section D.4."

The Department acknowledges that the regulation at N.J.A.C 7:14A-6.12(c)(2) only requires an update of the O&M Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works O&M procedures. Based upon the evaluation of the implementation of the NMCs specified in the EPA's National CSO Policy to date, the Department has included enhancements in order to clarify requirements consistent with the National CSO Policy. The Department has determined that it is necessary to provide more detail in the permit, consistent with EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995, on the necessary components of an O&M Program and Manual. The Department maintains that an annual update is appropriate and has required such at Part IV.F.1.a.

This change affects Part IV.F.1.m of the Final permits.

Part IV Combined Sewer Management, Section F, NMC #2. Maximum Use of the Collection System for Storage

137. COMMENT: . Regarding Part IV.F.2.a, in-line storage is typically only practical in areas with large diameter sewers with flat or no slope. While it is possible to use the "entire collection system" for in-line storage it is typically not cost-effective, nor practical. Attempting to use the entire sewer system for storage can raise the hydraulic grade line and surcharge and pressurize the system, and could potentially damage equipment such as pump stations. PVSC requests that "entire collection system" be revised to "collection system", and the phrase "...to the extent possible..." should be revised "...to the extent practical...." [42]

138. COMMENT: In-line storage is typically only practical in areas with large diameter sewers with flat or no slope. While it is possible to use the "entire collection system" for in-line storage, it is typically not cost-effective, nor practical. The use of the word "ensures" implies a guarantee that may not be practical to meet. This requirement should be revised to read "The permittee shall use the ~~entire~~ collection system owned/operated by the permittee for in-line storage of sewage… by ~~ensuring~~ demonstrating that the sewage is retained in the sewer

system to the extent ~~possible~~ reasonably practical using existing infrastructure to minimize CSO discharges…" [19] [26]

139. COMMENT: Part IV Section F.2.a is overbroad even as applicable to NHSA. In-line storage is typically only practical in areas with large diameter sewers with flat or no slope. The use of the word "ensures" implies a guarantee that may not be practical to meet. The word "entire" should be struck and such activities should occur "as necessary." [25]

140. COMMENT: It may not be appropriate to use the "entire" sewer system for storage of sewage. Attempting to use the entire sewer system for storage can raise the hydraulic grade line and surcharge and pressurize the system, and perhaps damage equipment such as pump stations. Therefore, add "to the maximum extent possible" before this sentence. [28] [31] [35] [44]

141. COMMENT: Delete "the entire" in the phrase "to enable the entire collection system" and replace it with "appropriate segments of the." All areas of the collection system may not be appropriate for storing additional wet weather flows. [35] [42] [44]

142. COMMENT: The word "entire" should be struck and such activities should occur "as necessary." [9]

RESPONSE 137-142: Part IV.F.2.a is stated as follows:

> "a. The permittee shall 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 possible to minimize CSO discharges (volume, frequency and duration), while not creating or increasing sewage overflows, including to basements, streets and other public and private areas."

The Department does not agree with the suggested language changes. While the Department maintains that the entire sewer system should be evaluated to maximize flow to the STP, the Department recognizes that it may not be feasible or practical to use the "entire" collection system for storage. This is why the Department included the phrase "to the extent possible" within this section. As the second minimum control, *Maximum Use of the Collection System for Storage* means making relatively simple modifications to the CSS to enable the system itself to store wet weather flows until downstream sewers and treatment facilities can handle them; thus decreasing the magnitude, frequency, and duration of CSOs. However, any modifications considered by the permittee should be analyzed to ensure that they will not cause other problems such as street or basement flooding. Please refer to **RESPONSE 70** in Section C of the Response to Comments document which additional information regarding basement flooding. The permittee should evaluate more complex modifications (e.g., those requiring extensive construction) as part of the permittee's development of its LTCP.

Consistent with the EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995, the permittee should consider implementing

the following *Maximum Use of the Collection System for Storage* control measures. This shall include the inspection of the collection system that is owned/operated by the permittee to enable identification of any deficiencies that may restrict the use of the system's available storage capacity.

No changes have been made to the Final permit(s) as a result of these comments.

143. COMMENT: Part IV Section F.2.a states "The permittee shall use the entire collection system owned/operated by the permittee for in-line storage of sewage…by ensuring that the sewage is retained in the sewer system to the extent possible to minimize CSO discharges…" BCUA does not own or operate the combined sewer collection system, therefore this section should be eliminated from the permit. [21]

144. COMMENT: Section F.2.a requires JMEUC to "use the entire collection system for in-line storage." Obviously this provision (and entire section entitled *Maximum use of the collection system for storage*) has no relevance to JMEUC and the permit needs to reflect that; nonetheless the language is overbroad even as applicable to Elizabeth City. [9]

145. COMMENT: Regarding the NJPDES permit issued to MCUA, MCUA does not own or operate a CSS. Therefore, delete this section in its entirety. [15]

RESPONSE 143-145: The Department does not agree that Part IV, Section F.2.a., should be deleted from BCUA Little Ferry STP (NJ0020028), JMEUC (NJ0024741) or MCUA (NJ0020141) NJPDES CSO permits. Although these permittees may not own/operate all of the particular components of a CSS, all of the permittees that have been issued these CSO permits do own portions of a CSS POTW. In the event the only portion of the CSS that the permittee owns is the STP or pump station(s), then in-line storage is not applicable. Inasmuch as the Department does not have detailed information for each permittee, the condition remains appropriate. As written, NMC #2 applies to those portions of the entire collection system owned or operated by the permittee, which addresses the commenters' concerns that they not be required to maximize collection in portions of the CSS they do not own.

Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of these comments.

146. COMMENT: Delete the phrase from Part IV.F.2.a which states "including to basements, streets and other public and private areas." These are not discharges to waters of the United States and therefore are not the proper subject of a NJPDES Permit. [20] [32] [35] [40] [42] [44]

RESPONSE 146: The Department does not agree the phrase "including to basements, streets and other public and private areas" should be deleted from Part IV.F.2.a. EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May

1995, *Maximum Use of the Collection System for Storage* states that, "Possible modifications should be analyzed to ensure that they will not cause other problem such as street or basement flooding." Please refer to **RESPONSE 70** in Section C of this Response to Comments document for additional information.

No changes have been made to the Final permit(s) as a result of this comment.

147. COMMENT: Part IV.F.2.b requires the permittee to minimize the introduction of "sediment and obstructions in the entire collection system...." This provision should normally be covered by street sweeping rather than a new "minimization" program of uncertain need and scope. The legal basis for this directive is not apparent and must be identified. This requirement can be interpreted in various ways and should be clarified. As presently worded, failure to minimize these conditions would be a permit violation, even if the CSO discharges themselves are not in violation. This is not reasonable. [25]

148. COMMENT: This requirement appears to be from the Department's Stormwater Regulations and will prevent debris greater in size than the maximum sized openings from entering the collection system. These controls will help to minimize obstructions from entering the collection system but have little impact on the minimization of sediment to the system. It must be stated in the permit that the replacement or modification of catch basins, other than retrofitting of catch basin inlet, is not required to satisfy this section of the permit. [35]

149. COMMENT: Part IV.F.2.b can be interpreted in various ways. This requirement should be revised to read "The permittee shall use appropriate means to minimize to the extent practical, the introduction of sediment and obstructions…" [19] [26] [42] [44]

RESPONSE 147-149: Part IV.F.2.b is stated as follows:

> "b. The permittee shall minimize the introduction of sediment and obstructions in the entire collection system owned/operated by the permittee that conveys flow to the treatment works pursuant to sections F.1 and F.7."

As referenced in this section, Part IV.F.1 concerns *Proper Operation and Regular Maintenance Program Requirements*, and Part IV.F.7 concerns the *Implementation of Pollution Prevention Measures*. Both of these sections include measures concerning the reduction of sediments and obstructions. Please refer to responses on Part IV.F.1 (NMC #1) and responses on Part IV.F.7 (NMC #7) for additional information.

The regulatory source of this requirement is not the Department's Stormwater Regulations, as asserted in this comment, but rather the National CSO Policy and N.J.A.C. 7:14A-11, Appendix C. The Department maintains that it is appropriate to require the minimization of the introduction of sediments and obstructions in the collection system consistent with EPA guidance. EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995, *Maximum Use of the Collection System for Storage* states that simple control measures can be implemented to increase storage capacity of a CSS such as

"Removal of Obstructions to Flow." This can include maintenance activities to remove and prevent accumulations of debris and sediment that restrict flow. The Department maintains that Part IV.F.2.b is appropriate as written and is a relevant requirement for the purposes of NMC #2. Further, the Department maintains that street sweeping and the retrofitting of catch basins will aid in a reduction of accumulated debris and sediments.

The requirement to retrofit catch basins, as referenced in Part IV.F.7 of the NJPDES CSO permits, includes the same retrofitting design standard as included in the NJPDES MS4 permit which has been applicable to municipal separate storm sewers since 2004. This includes the retrofitting of existing catch basins on streets within combined sewer areas to meet the design standards when streets are repaved, reconstructed, resurfaced, or constructed new. While Part IV.F.2.b does not contain this detailed description as to when catch basins need to be retrofitted, the Department maintains that the reference to Part IV.F.7 is sufficient where the details regarding when to retrofit are included in Part IV.F.7.a.ii.

No changes have been made to the Final permit(s) as a result of these comments.

150. COMMENT: Part IV Section F.2.b requires the permittee to minimize the introduction of "sediment and obstructions in the entire collection system...." Again, this provision is not applicable to JMEUC and, we would note, should normally be covered by street sweeping for Elizabeth City rather than a new "minimization" program of uncertain need and scope. [9]

151. COMMENT: PVSC requests that Part IV Section F.2.b be deleted from its Individual NJPDES permit. PVSC does not own the local collection systems, catch basins or roadways and therefore cannot minimize the sediment entering its interceptor. Also, PVSC requests that "entire collection system" be revised to "collection system." [15]

RESPONSE 150-151: The permittee is required to implement Part IV.F.2.b for those portions of the CSS that they own/operate. Inasmuch as the Department does not have detailed information for each permittee, the condition remains appropriate. Part IV.F.2.b is applicable to the extent that the permittee owns or operates that portion of the infrastructure that is the subject of the permit condition. Although these permittees may not own/operate all of the particular components of a CSS, all of the permittees that have been issued these CSO permits do own portions of a CSS POTW. As written, NMC #2 applies to those portions of the entire collection system owned or operated by the permittee, which addresses the commenters' concerns that they not be required to maximize collection in portions of the CSS they do not own. Please refer to responses on Part IV.F.7 (NMC #7) for additional information on the permittee's responsibilities regarding pollution prevention measures. In sum, the Department does not agree that Part IV Section F.2.b. should be removed from the JMEUC (NJ0024741) and PVSC (NJ0021016) NJPDES permits.

Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No changes have been made to the Final permit(s) as a result of these comments.

152. COMMENT: Part IV.F.2.d is overbroad and confusing. The statement implies minor modifications to enable the "entire" collection to be used for storage of wet weather flows. Moreover, the collection system cleaning of 100,000 feet of sewer main a year is in place to maximize flow carrying/storage capacity. Currently the system storage is controlled by the CSO regulators and pump stations. There are no other facilities in place to facilitate storage in the upper parts of the system.

The requirement should be modified to read "The permittee shall identify and implement minor modifications, based on ongoing evaluations…to enable appropriate segments of the collection system owned/operated by the permittee…to store additional wet weather flows. Moreover, the collection system can currently deliver more flow than the STPs are rated for, so collection system changes are not required." [25]

153. COMMENT: Part IV.F.2.d is confusing when the statement implies minor modifications in one sentence and then to enable the "entire" collection to be used for storage of wet weather flows. This requirement should be modified to read "The permittee shall identify and implement minor modifications, based on ongoing evaluations…to enable appropriate segments of the entire collection system owned/operated by the permittee…to store additional wet weather flows." [19] [26]

RESPONSE 152-153: The Department appreciates the language suggestions provided and has incorporated revisions to this requirement in Part IV.F.2.d of the Final NJPDES CSO permits as follows:

"d. The permittee shall identify and implement minor modifications, based on the ongoing evaluations, to enable appropriate segments of the collection system ~~from the characterization required under Section F.1, to enable the entire collection system~~ owned/operated by the permittee ~~that conveys flow to the treatment works~~ to store additional wet weather flows to reduce any CSOs ~~sewage overflows~~ until downstream sewers and treatment facilities can adequately convey and treat the flows."

This change affects Part IV.F.2.d of the Final permits.

Part IV Combined Sewer Management, Section F, NMC #3. Review and modification of pretreatment requirements to assure CSO impacts are minimized

154. COMMENT: Section F.3.a requires JMEUC to prioritize the discharges from SIUs in relation to their proximity to CSO outfalls and the nature of the discharges. This would reasonably be within JMEUC's responsibilities as the delegated agency running the pretreatment program. [9]

155. COMMENT: PVSC requests that the word "dischargers" be revised to "discharges" in Part IV.F.3.b. PVSC requests that the Department revise this condition to state that "[t]he permittee shall require, upon reissuance of an expired industrial user permit and new permits to

new dischargers, that SIUs investigate ways to minimize their discharges during wet weather and report their findings to the permittee." [42]

156. COMMENT: Replace "dischargers" in Part IV.F.3.b with "discharges." [15]

157. COMMENT: The Draft permit at Section F.3.c provides "[w]hen and where necessary...to the greatest extent practicable...." PVSC requests that the Department provide specific guidance on determining "When and where necessary." [15] [42]

158. COMMENT: PVSC requests that "the permittee shall establish agreements...or ordinances" be revised to "the permittee shall incorporate permit requirements restricting discharges..." [15]

159. COMMENT: Entering into agreements with SIUs to restrict discharges by agreement is overly complicated and cumbersome and is difficult to enforce. Rather, we recommend that, as an alternative in Part IV.F.3.c, "When and where necessary, the permittee shall revise the permits for SIUs by inserting language (through Permit revisions) to restrict discharges to the greatest extent practicable during wet weather periods." [15] [42]

RESPONSE 154-159: The Department has considered the proposed language changes and agrees that some language revisions are appropriate. These comments were submitted on NJPDES CSO STP permits, where the permittee is also the delegated local agency for its pretreatment program. Part IV.F.3 contains three requirements and is revised as follows:

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

a. The permittee shall determine the locations, associated CSO outfalls and discharge volume, loading and toxicity ~~nature~~ of the ~~Significant Industrial Users (~~SIUs~~)~~ for the entire collection system which is owned/operated by the permittee; determine and prioritize the potential environmental impact of these SIUs by CSO outfall; include this information in the characterization portion of the O&M Program and ~~corresponding~~ Manual as required in Section F.1. This information shall be updated annually in the Progress Report in accordance with Section D.4.

b. The permittee shall require that SIUs investigate ways to minimize their discharges ~~dischargers~~ during wet weather and report their findings to the permittee.

c. ~~When and where necessary, the~~ The permittee shall establish agreements with SIUs or ordinances specifying that the SIUs (especially for batch discharges, non-continuous dischargers) should restrict discharges to the ~~greatest~~ extent practical ~~practicable~~ during wet weather periods."

The Department does not agree with the commenters in that written agreements with SIUs are mandated. Rather, this permit condition allows the DLA to apply judgment to modify their SIU permits or establish agreements and ordinances to restrict SIUs during wet weather periods

based on the prioritization matrix as described in Part IV.F.3.a. Please see **RESPONSE 99-100** in Section A of the Response to Comments document for further information regarding prioritization. Since permittees have existing sewer use permits for SIUs, it is of course acceptable for the permittee to modify the permit instead of entering into a separate agreement with the SIU. This is consistent with the overall goal of the NJPDES CSO permits to minimize discharges of CSOs.

The above notwithstanding, the Department intends to release guidance for pretreatment programs to assist local agencies and SIUs on how to regulate and minimize flows during emergency situations including the relevant legal authority.

This change affects Part IV.F.3 for NJPDES CSO permits issued to DLAs.

160. COMMENT: Remove Part IV.F.3 entirely since pretreatment requirements for SIUs within the Woodcliff Area CSS are regulated by the Department. SIUs within the Woodcliff Area CSSs in North Bergen Township and the Town of Guttenberg are controlled by the Department since NBMUA is not a delegated authority. [34]

161. COMMENT: NBMUA does not have any authority over SIUs, therefore all requirements relating to SIUs must be removed. SIUs within the Central Area CSS in North Bergen Township are controlled by PVSC, not NBMUA. [33]

162. COMMENT: Section F.3.a requires NHSA to prioritize the discharges from SIUs in relation to their proximity to CSO outfalls and the nature of the discharges. First, the Department is the entity responsible for pretreatment program management so actions in this area must occur jointly. Second, this is a new requirement that should be deleted. Third, there are currently 3 SIUs in the NHSA system.

This permit requires an engineering study to determine SIU impacts on CSO discharges. In the event a new requirement can be imposed, it should only be imposed if there is a schedule of compliance. [25]

RESPONSE 160-162: These comments pertain to Part IV.F.3.a as issued to non-delegated STPs. Note that Part IV.F.3.a is identical for delegated local agencies, non-delegated local agencies and municipalities who have been issued NJPDES CSO permits. Part IV.F.3.a requires CSO owners/operators to account for industrial pollutants that may be included in their CSO discharges and is relevant for the collection system portion of the system. The Department has revisited Part IV.F.3.a where it has been revised as follows:

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

a. The permittee shall determine the locations, associated CSO outfalls and discharge volume, loading and toxicity ~~nature~~ of the ~~Significant Industrial Users (~~SIUs~~)~~ for the entire collection system which is owned/operated by the permittee; determine and prioritize the potential environmental impact of these SIUs by CSO outfall; include this information in the characterization portion of the O&M Program and ~~corresponding~~

Manual as required in Section F.1. This information shall be updated annually in the Progress Report in accordance with Section D.4."

The Trenton Sewer Utility (NJ0020923), North Bergen Woodcliff STP (NJ0029084), NHSA-River Road STP (NJ0025321), and NHSA Adams Street STP (NJ0026085) are considered non-delegated local agencies. The Department is responsible for the issuance of NJPDES permits to SIUs that discharge to non-delegated local agencies, in accordance with N.J.A.C. 7:14A-21. However, the requirement to inventory SIU discharges is applicable to all CSO permittees, both delegated local agencies and non-delegated local agencies. Chapter 4 of EPA's "Guidance for Nine Minimum Controls" (EPA 832 B-95-003) does not differentiate between delegated and non-delegated local agencies as it pertains to a review of pretreatment program requirements and even goes beyond the STPs and applies to the collection systems.

This is not an entirely new requirement for NJPDES permits as issued to STPs. Each non-delegated local agency is currently responsible for preparing an "Annual Pretreatment Program Report which shall consist of a listing of all users which meet the significant indirect user definition" (Part IV.F.4.b in the Sanitary Wastewater section of each non-delegated local agencies NJPDES DSW permit). Furthermore, existing pretreatment program requirements for non-delegated local agencies require notice to the Department of "any substantial change or proposed change in the volume or character of pollutants being introduced into the POTW by existing SIUs or any substantial change or proposed change in the volume or character of pollutants being introduced into the POTW by a user" (Parts IV.F.2.a.i and ii in the Sanitary Wastewater section of each non-delegated local agencies NJPDES DSW permit).

Regarding the requirement to determine and prioritize the potential environmental impact of these SIUs by CSO outfall, this is described in EPA's Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003) dated May 1995. Under NMC #3 *Review and Modification of Pretreatment Requirements*, permittees are required to "determine whether nondomestic sources are contributing to CSO impacts and if so, investigate ways to control them."

As described in the CSO Submittal Summary, the requirements of Part IV. F.3.a shall be completed as part of the O&M manual characterization requirement which is due at EDP + 6 months. Please refer to **RESPONSE 99-100** in Section A of the Response to Comments document regarding factors to be used to prioritize SIUs.

This change affects Part IV.F.3 for NJPDES CSO permits issued to non-delegated local agencies.

163. COMMENT: Paterson City requests that all of the comments and requirements relating to the SIUs be removed from the permit and be made part of PVSC's permit. Since PVSC is the delegated SIU agency, the individual municipalities have little or no information on the SIUs. PVSC has the resources, the information, and the current regulatory obligation to monitor and regulate the SIUs. By keeping the requirement with PVSC, both EPA and the Department will achieve a more integrated and uniform approach in dealing with the SIUs.

We understand that the purpose of the SIU requirements is to better control SIU discharges during wet weather events to minimize any potential for SIU based discharge material to end up in the waterway from a CSO discharge. This responsibility is better left with PVSC because it is PVSC who owns and operates the regulators and the interceptor in almost all circumstances. Thus, the municipalities have virtually no control over the wastewater conveyed to the POTW and the vast majority of the wastewater discharged through CSO outfalls. We have discussed this matter with EPA, who stated that "EPA is willing to largely allow the removal of SIU-related items from the O & M Plan; should NJDEP decide to require it." [40]

164. COMMENT: Remove Part IV.F.3 entirely since pretreatment requirements for SIUs within the CSS are regulated by PVSC. The Town of Kearny does not, and cannot, regulate SIUs. This is the responsibility of PVSC through their IPP authority and the associated programs. [32]

165. COMMENT: Part IV.F.3 applies only to PVSC and should be deleted from Newark's Permit. [35]

166. COMMENT: This requirement should not be applicable to Elizabeth City as SIUs are regulated by the JMEUC. [12]

RESPONSE 163-166: These comments were all submitted by municipalities, who were issued NJPDES CSO permits where Part IV.F.3 is the same language as summarized in **RESPONSE 160-162** above.

The Department recognizes that municipalities are not responsible for implementing a pretreatment program or for NJPDES SIU permitted discharges. However, the Department maintains that Part IV.F.3.a, as written, is appropriate because it requires CSO owners to account for industrial pollutants that may be included in their CSO discharges and is relevant for the collection system portion of the system. Section 4 of EPA's "Guidance for Nine Minimum Controls" (EPA 832 B-95-003) states that even permittees without a delegated pretreatment program "should still determine whether nondomestic sources are contributing to CSO impacts." Information such as the location of SIUs, SIU permit limitations, and effluent characterization can be obtained by coordinating with the STP.

No additional changes have been made to the Final permit(s) as a result of these comments.

167. COMMENT: The National CSO Policy and New Jersey regulations require "review and modification of pretreatment requirements to assure CSO impacts are minimized." EPA's "Guidance for Nine Minimum Controls" provides that "...minimum control should not require additional effort unless CSS characterization and modeling indicate that a pollutant from a nondomestic source is causing a specific health, water quality, or environmental problem." The National CSO Policy requires that impacts from SIUs be minimized, not the discharges. PVSC requests that this section be revised to be consistent with the National CSO Policy and the New Jersey Regulations. [42]

168. COMMENT: Delete the phrase "determine and prioritize the potential environmental impact of these SIUs by CSO outfall." The term "potential environmental impact" does not appear in the National CSO Policy or EPA's "Guidance Manual on Nine Minimum Controls" and is not defined within this Draft permit. It is requested that this be deleted and be replaced with "assess the impact of nondomestic discharges from CSOs to receiving waters, including the identification of nondomestic sources that are significant contributors of specific pollutants implicated in water quality problems." Additionally, PVSC requests that the Department provide guidance on determining the potential environmental impact and the method of prioritization. [42] [44]

169. COMMENT: Delete the phrase "determine and prioritize the potential environmental impact of these SIUs by CSO outfall" and replace with "assess the impact of nondomestic discharges on CSOs and receiving waters, including the identification of non-domestic sources that are significant contributors of specific pollutants implicated in water quality problems." The term "Potential environmental impact" does not appear in the National CSO Policy or EPA Guidance. [29]

170. COMMENT: Delete the phrase "and discharge nature" from Section F.3.a. "Discharge nature" is not a scientific or regulatory term, and does not appear in the National CSO Policy or EPA's "Guidance Manual on Nine Minimum Controls." [42] [44]

171. COMMENT: Delete the phrase "and discharge nature." Discharge nature is vague, and does not appear in the National CSO or EPA Guidance Manual on Nine Minimum Controls. [29] [33] [34]

172. COMMENT: Part IV.F.3.c requires that JMEUC have written agreements with the SIUs to minimize their wet weather discharges to the sewer system to the "greatest extent practicable." The National CSO Policy discusses minimizing SIU inputs, but does not require such actions be taken "to the greatest extent practicable." Review and modification of pretreatment requirements is only necessary to ensure that CSO impacts are minimized.

Moreover, as JMEUC does not own or operate CSO outfalls, it would appear that they have little legal authority to regulate SIU discharges as they relate to CSOs. At the current time, there is no mechanism in place to enforce such restrictions. Further clarification and legal consult will be necessary to evaluate the impacts on the SIUs and to determine whether such requirements would cause these sewer users to relocate outside of the sewer district.

Why were various new requirements established that don't appear in the National CSO Policy or in adopted rules (e.g., SIU discharge reduction "to extent practicable")? [9]

173. COMMENT: The Town of Harrison states that much of the language in this section does not appear in the CSO Policy or in New Jersey Regulations on CSOs. Citation to authority and guidance documents should be provided. Barring any such authority, this section should be made to conform with the requirements of the CSO Policy. [44]

RESPONSE 167-173: Please refer to the revised permit language as included in **RESPONSE 154-159** and **RESPONSE 160-162** and **RESPONSE 163-166** all of which are in Section C of the Response to Comments document which serves to resolve many of these comments raised.

The Department agrees that the National CSO Policy and New Jersey regulations require "review and modification of pretreatment to assure CSO impacts are minimized." In fact, this is the title of NMC #3 as well as the heading in Part IV.F.3. The Department also agrees with the commenter in that there is language in EPA's "Guidance for Nine Minimum Controls" (EPA 832 B-95-003) as contained in Chapter 4, *Review and Modification of Pretreatment Requirements* regarding this requirement. An excerpt is as follows:

> "Under the third minimum control, the municipality should determine whether nondomestic sources are contributing to CSO impacts and, if so, investigate ways to control them. The objective of this control is to minimize the impacts of discharges into CSSs from nondomestic sources (i.e., industrial and commercial sources, such as restaurants and gas stations) during wet weather events, and to minimize CSO occurrences by modifying inspection, reporting, and oversight procedures within the approved pretreatment program. Once implemented, this minimum control should not require additional effort unless CSS characterization and modeling indicate that a pollutant from a nondomestic source is causing a specific health, water quality, or environmental problem."

The Department maintains that the identification and prioritization of the potential environmental impact of the SIUs by CSO outfall is appropriate. By prioritizing and minimizing SIU discharges during wet weather, the permittee is minimizing impacts from the SIU facilities and also freeing up capacity in the conveyance system and the STP. In addition to being included in N.J.A.C. 7:14A-11, Appendix C, Part II.B, this requirement is consistent with the intent of NMC #3 in EPA's "Guidance for Nine Minimum Controls" (EPA 832 B-95-003) based on the use of the term "potential impact" to assure impacts from the SIU discharges via CSOs are minimized. Specifically, Section 4 of this guidance document concerns the *Review and Modification of Pretreatment Requirements* where the term "potential impact" is included in the following excerpt:

> "The municipality should first prepare an inventory of all nondomestic discharges to the collection system. The inventory should include information on the volume of flow and the pollutant types and concentrations in the discharge. By identifying the locations where nondomestic discharges enter the CSS on a map of the system, the potential impact of the nondomestic discharge on the CSO will be more clear. Municipalities with existing pretreatment programs should have all of this information readily available because as part of approved pretreatment programs, they are required to identify and locate all possible industrial users (in accordance with 40 CFR 403.8(f)(2)(i)).
>
> If the number of nondomestic users is large enough to preclude review of all facilities, the municipality should focus on the facilities with the greatest potential impact with regard to CSOs. This determination can be based on the size of the discharge, the concentration of

pollutants that might be contributing to water quality criteria exceedances, or the proximity of the nondomestic user's discharge point to the CSO outfall."

No additional changes have been made to the Final permit(s) as a result of these comments.

174. COMMENT: The CCMUA permit requires coordination with SIUs for Parts IV.F.3.b through c. This is not included in the Camden and Gloucester City permits. [1]

RESPONSE 174: As previously described in **RESPONSE 154-159**, **RESPONSE 160-162** and **RESPONSE 163-166**, the Department issued different sets of requirements for NMC #3 for delegated STPs versus non-delegated STPs and municipalities. Therefore, it is correct in that Part IV.F.3.b through c differs for CCMUA (a delegated STP) as compared to the Camden and Gloucester City permits (municipalities).

No additional changes have been made to the Final permit(s) as a result of this comment.

Part IV Combined Sewer Management, Section F, NMC #4, Maximization of Flow to the POTW for Treatment

175. COMMENT: The BCUA does not own or operate the local municipal collection systems. The requirement should be changed to read:

"a. The permittee shall operate and maintain the entire interceptor sewer system owned and operated by the permittee that conveys flows to the treatment works and treatment plant to maximize the conveyance of wastewater to the STP for treatment subject to existing capacity." [21]

RESPONSE 175: The Department agrees that a reference to existing capacity is appropriate in this permit condition and has modified this language as follows:

"a. The permittee shall 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."

It is suggested that the phrase "entire collection system owned/operated" be replaced with "entire interceptor sewer system owned and operated." While for the commenter's STP it may be the interceptor sewer system that is owned and operated by the permittee, the Department does not agree that it is necessary in each individual permit to list every component of a permittee's collection system. This list would be extremely cumbersome for the permittee to prepare and is likely to change over time. Part IV.F.4.a is applicable to the extent that the permittee owns or operates that portion of the infrastructure that is the subject of the permit condition.

This change affects Part IV.F.4.a of the Final permits.

176. COMMENT: Section F.4.a requires JMEUC to "operate and maintain the entire collection system…to maximize conveyance of wastewater to the STP for treatment." JMEUC lacks the authority to undertake this activity as it is Elizabeth City's responsibility, with the exception of the approximately 1100 feet of interceptor sewer owned and operated by the JMEUC. [9]

177. COMMENT: JMEUC does not own/operate the collection system that conveys sewage to the POTW. Therefore, delete Part IV.F.4 in its entirety. [15]

178. COMMENT: MCUA does not own/operate a CSS. Therefore, delete Part IV.F.4 in its entirety. [15]

179. COMMENT: Section F.4.a requires NHSA to "operate and maintain the entire collection system…to maximize conveyance of wastewater to the STP for treatment." Please remove the word "entire" as it is overbroad. [25]

RESPONSE 176-179: Part IV.F.4.a is applicable to the extent that the permittee owns or operates that portion of the infrastructure that is the subject of the permit condition. This is illustrated by the phrase "owned and operated by the permittee." Given the circumstances described in these comments, the Department agrees that it is not the responsibility of the STP to operate and maintain those parts of the collection system that are not owned or operated by them.

No additional changes have been made to the Final permit(s) as a result of these comments.

180. COMMENT: EPA states that the evaluation and implementation of alternatives for increasing flow to the STP is an important requirement of the National CSO Policy; therefore, this requirement should not be limited specifically to "low cost alternatives." [24]

RESPONSE 180: EPA's "Guidance for Nine Minimum Controls" at Chapter 5 states that NMC #4 should entail "simple modifications to the CSS and treatment plant to enable as much wet weather as possible to reach the treatment plant." Permittees "should identify and evaluate more complex CSS and POTW modifications as part of their LTCPs." The Department agrees that the permit should be changed and adopts EPA's statement in its "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995 that "NMCs are minimum technology-based controls that can be used to address CSO problems without extensive engineering studies or significant construction costs, prior to implementation of long-term control measures." Part IV.F.b is revised as follows:

"b. The permittee shall evaluate and implement ~~low cost~~ alternatives for increasing flow to the STP in accordance with i and ii below that do not require extensive engineering studies or significant construction costs:

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 ~~e.iii~~ 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."

This change affects Part IV.F.4.b of the Final permits.

181. COMMENT: Because BCUA does not own or operate the local municipal collection systems, Part IV.F.4.b should be changed to read:

"b. The permittee shall evaluate and implement low cost alternatives for increasing flow to the STP in accordance with i and ii below.

i. Capacity evaluations of the ~~entire collection~~ interceptor sewer system owned/operated by the permittee that conveys flows to the treatment works in accordance with Section F.1.e.iii to determine to determine the maximum amount of flow that can be stored and transported without surcharging the system.

ii. Identification of other activities conducted and/or planned to further maximize flow to the ~~POTW~~ STP." [21]

RESPONSE 181: Part IV.F.4.b has been revised as described in **RESPONSE 180** of Section C of the Response to Comments document. As noted in this comment, it is suggested that the phrase "entire collection system" be replaced with "interceptor sewer system." As described in **RESPONSE 175** of Section C of the Response to Comments document, the Department does not agree that it is necessary in each individual permit to list every component of a permittee's collection system. The Department also does not agree that the term "entire" should be deleted from Part IV.F.4.b.i. Use of the word "entire" helps to ensure that there are no "gaps" in any capacity evaluation of the collection system. Part IV.F.4.b is applicable to the extent that the permittee owns or operates that portion of the infrastructure that is the subject of the permit condition.

The commenter is also suggesting changes to ii namely "Identification of other activities conducted and/or planned to further maximize flow to the STP without surcharging the system." The Department does not agree that this additional language is appropriate as there are certain circumstances surcharging the system may be appropriate such as NMC #2, *Maximum use of the collection system for storage.*

No additional changes have been made to the Final permit(s) as a result of this comment.

182. COMMENT: Section F.4.b requires JMEUC to evaluate maximization of flow to the plant via collection system changes (Part IV.F.4.b.i) and POTW changes (Part IV.F.4.b.ii). Only Part IV.F.4.b.ii should be applied to the CSS owned and operated by Elizabeth City and the approximately 1100 feet of interceptor sewer owned and operated by the JMEUC. Also, this new requirement doesn't appear in the National CSO Policy or in adopted rules. [9]

183. COMMENT: Wet weather flow from Newark to the PVSC is controlled directly or indirectly by PVSC. The maximization of wet weather flow to the STP is not under the

control of Newark and therefore should be removed from its permit. While the determination of the capacity of the Newark's CSS can be determined, the determination of the PVSC Transmission System and Treatment Capacity is that of PVSC, not Newark. [35]

RESPONSE 182-183: The Department maintains that it is appropriate to include NMC #4 (Part IV.F.4) in all NJPDES CSO permits issued to both STPs and municipalities. Part IV.F.4.b is applicable to the extent that the permittee owns or operates that portion of the infrastructure that is the subject of the permit condition. This is illustrated by the phrase "owned and operated by the permittee." This provision requires the permittee to demonstrate compliance with NMC #4 and is not a new requirement as noted in the draft permit fact sheets. The Department maintains that the permit condition as written is appropriate.

Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

No additional changes have been made to the Final permit(s) as a result of this comment.

184. COMMENT: Section F.4.b requires NHSA to evaluate maximization of flow to the plant via collection system changes (Section b.i) and POTW changes (Section b.ii). The maximum flow to the plant is presently restricted by the loadings that keep the trickling filter biology alive and by the velocity of flow that can be put to the trickling filters. Flow is currently maximized to each plant during wet weather events and only a major system upgrade would be able to increase that maximum flow. Please identify the timeframe in which low cost alternatives must be submitted. [25]

185. COMMENT: PVSC requests that the Department recognize in the permit at Part IV.F.4.b.ii that primary effluent blending is allowed as a means to maximize flow to the STP. [42]

RESPONSE 184-185: While revisions have been incorporated to Part IV.F.4.b as described in **RESPONSE 180** above, NMC #4 (Part IV.F.4) focuses on the evaluation and implementation of relatively simple modifications to the collection system and STP. Alternatives such as a major system upgrade should be considered as part of LTCP #4 (Part IV.G.4), namely *Evaluation of Alternatives*. Measures already taken to maximize flow for treatment in compliance with NMC #4 should be documented in the Progress Reports. Blending may be an approvable option as part of the LTCP under certain scenarios. Please refer to **RESPONSE 95-100** in Section D of the Response to Comments document that pertain to Part IV.G.4 (LTCP #4) for additional information on "blending."

Regarding the timeframe for evaluating and implementing additional control measures, compliance with the NMCs is an ongoing obligation and permittees should provide relevant information in the Progress Reports as per Part IV.D.4. Please refer to **RESPONSE 181** in Section C of the Response to Comments document.

No additional changes have been made to the Final permit(s) as a result of these comments.

186. COMMENT: Where does Section F.1.e.iv appear in the permit as referenced in Part IV.F.4.b.i? [6]

RESPONSE 186: The commenter is referring to the NJPDES CSO permits issued to CCMUA, the City of Camden, and the City of Gloucester. The commenter is correct in that Part IV.F.4.b.i contains an erroneous reference to Section F.1.e.iv for those three permits. This reference should be to Section F.1.e.iii which refers to NMC #1 (*Proper Operation and Regular Maintenance Program Requirements*) and concerns an updated characterization of the entire collection system owned/operated by the permittee that conveys flows to the STP. This error was corrected in all Draft NJPDES CSO permits issued subsequently.

The Department has corrected this error in the Final NJPDES CSO permits issued to CCMUA (NJ0026182), the City of Camden (NJ0108812) and the City of Gloucester (NJ0108847). The revised language is:

"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.~~e.~~f ~~iv~~. to determine the maximum amount of flow that can be stored and transported."

This change affects Part IV.F.4.b.i in Final permits issued to CCMUA (NJ0026182), the City of Camden (NJ0108812) and the City of Gloucester (NJ0108847).

Part IV Combined Sewer Management, Section F, NMC #5, Prohibition of CSOs During Dry Weather

187. COMMENT: Replace "Since the permittee does not own / operate any CSO outfalls, there are no monitoring requirements at this time" with "The permittee shall operate the system in such a way that it does not cause any dry weather overflow from the collection system owned/operated by other permittees in the hydraulically connected system." [11] [18] [24]

RESPONSE 187: The suggested revision is applicable to Part IV.F.5.a as included in the four NJPDES CSO permits issued to STPs who do not own CSO outfalls, specifically JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028), PVSC (NJ0021016) and MCUA (NJ0020141), The Department recognizes that there may be instances where the STP may have control over equipment in the hydraulically connected system that could have an effect on DWOs. For example, an STP may own the regulators which could potentially affect DWOs. As a result, the Department has revised this language as follows:

"5. Prohibition of CSOs during dry weather

a. The permittee shall operate the system in such a way that it does not cause any dry weather overflow from the collection system owned/operated by other permittees in the hydraulically connected system. ~~Since the permittee does not own and/or operate any CSO outfalls, this proposed permit action does not include the prohibition of discharges from CSOs during dry weather at this time.~~"

Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

This change affects Part IV.F.5.a in Final permits issued to JMEUC (NJ0024741), BCUA Little Ferry STP (NJ0020028), PVSC (NJ0021016) and MCUA (NJ0020141).

188. COMMENT: As stated in Part IV.F.5.a, a DWO could be the result of inadequate maintenance or conditions in the CSS that may be beyond the control of Newark. While DWOs are not a permitted discharge, they may occur despite the best efforts of the permittee. To state in the permit that DWOs are prohibited gives the impression that if a DWO occurs the permittee, despite its best efforts, has caused the DWO. Please remove the word "prohibited" and replace it with the phrase "non-permitted discharge" [35]

RESPONSE 188: Part IV.F.5 for municipalities and STPs that own CSOs is separate from the permit condition described above. Part IV.F.5.a is stated as follows for the City of Newark's NJPDES CSO permit:

"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."

The Department does not agree that the word "prohibited" should be removed from F.5.a. Compliance with the NMCs including the prohibition on DWOs (NMC #5) has been required in multiple permit cycles. DWOs are categorically prohibited by the National CSO Policy and N.J.A.C. 7:14A-11, Appendix C, and this NMC is incorporated verbatim into the NJPDES CSO permits. On a case-by-case basis, the Department may allow temporary use of the CSO outfall structures for other types of discharges to address extraordinary circumstances. Please refer to **RESPONSE 6-10** of Section B of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

189. COMMENT: The definition of DWO could prove problematic for the City of Paterson. For those regulators owned and operated by PVSC (CSO outfalls 001A thru CSO 027A and CSO outfall 032A) and for the regulator operated by the City of Paterson (CSO outfall 033), site location or proximity of the regulators to their respective outfalls effectively eliminates or significantly reduces the possibility for dry weather discharge from these outfalls independent of a CSO event. However, for four other outfalls owned and maintained by the City this is not the case. CSO outfall 028A was constructed as the outfall for a network of storm sewers constructed during an area-wide flood relief project, and serves as a flow bypass to Molly Ann Brook. In addition, CSO outfalls 028A, 029A and 031A service a system of internal CSO regulators through connections at points remote from their respective outfalls. The pipe systems transmitting flow from the internal CSO regulators to these three outfalls were envisioned and designed to achieve storm relief for flood prone areas. Inlet connections and

potential groundwater intrusion sources will exist between the regulators and the CSO outfalls. The pipe system tributary to CSO 030A, while constructed as a relief sewer, also services an internal regulator with a point of connection remote from the outfall. Inlet connections and potential groundwater intrusion sources will exist between the regulator and the CSO outfall.

In sum, the observation of dry weather flow from any of these four outfalls should not be considered a DWO unless associated with a discharge from the CSS at one of the internal regulators. Acknowledgement by the Department that this constitutes an extraordinary circumstance and approval for dry weather discharges from these four outfalls that are not the result of "CSOs" should be incorporated in the City of Paterson permit for these outfalls. In addition, the definition of a DWO may need clarification to address an "extraordinary circumstances."[40]

RESPONSE 189: Since storm water connections upstream of a CSO outfall will only contribute flow during precipitation events, this shall not be considered a DWO. In the event discharge occurs from the CSO outfall during dry weather days that do not meet the exemptions under the DWO definition, this could be considered a DWO. Please refer to **RESPONSE 6-10** of Section B of the Response to Comments document for additional information on the definition of DWO.

No changes have been made to the Final permit(s) as a result of this comment.

190. COMMENT: While the inspection of the CSS will determine if a DWO is occurring or if a condition is present that would present the opportunity for a DWO to occur, such inspections will not ensure that DWOs will not occur. Therefore in Part IV.F.5.c, please replace "to ensure there are no DWOs" with "to minimize the potential of DWOs and to abate DWOs that occur." [35]

RESPONSE 190: With the exception of those NJPDES CSO permits issued to STPs that do not own or operate CSO outfalls, Part IV.F.5.c is revised as follows:

"c. The permittee shall inspect the combined sewer system as required under Section F.1 to ~~ensure~~ minimize the potential of DWOs and to abate DWOs that occur ~~there are no DWOs~~."

DWOs are categorically prohibited by the National CSO Policy and permittees are required to take necessary steps to eliminate them. Dry weather discharges from CSOs shall 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).

This change affects Part IV.F.5.c of the Final permits.

191. COMMENT: . Some of the CSO outfalls have existing connections including, but not limited to, stormwater catch basins or storm sewers that connect downstream of the regulator. The prohibition in Part IV.F.5.d should only apply when such activities may cause a DWO,

pursuant to EPA's National CSO Policy, and should therefore be eliminated. Furthermore, this condition is not in NHSA's existing NJPDES permits, so it should be deleted. [25]

192. COMMENT: Regarding Part IV.F.5.d, some of the CSO outfalls have existing connections, including but not limited to stormwater catch basins or storm sewers that connect downstream of the regulator. These requirements go beyond the elimination of dry weather CSO discharges as required under the National CSO Policy and therefore should be eliminated. This requirement should be revised to read: "The permittee shall prohibit any new 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." [19] [26]

193. COMMENT: Please include in Section F.5.d:

> "Existing connections to the outfall downfall of the regulator can remain and removal, treatment or monitoring of those connections is not required. As outfalls are submerged or partially submerged and may be subject to tide water level changes and outfall may appear to be discharging during dry weather when it is in reality the exit of tidal flow. Therefore the determination that a DWO is not occurring shall be observed or measured at the regulator or other wet weather overflow control point." [35]

194. COMMENT: Regarding Part IV.F.5.d, this section does not address existing connection of storm sewers to CSO outfalls downstream of CSO regulators, or normal infiltration into the CSO outfall pipes. There may be existing storm sewers that tie into CSO outfalls downstream of a CSO regulator. Therefore, add "new" between "The permittee shall prohibit any" and "connections." [42] [44]

RESPONSE 191-194: With the exception of those NJPDES CSO permits issued to STPs that do not own or operate CSO outfalls, Part IV.F.5.d is stated as follows:

"5. Prohibition of CSOs during dry weather

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."

Any connection of a separate storm sewer downstream of the regulator should not contribute to a DWO, as such discharges would only occur during wet weather. As stated in the definition for DWO, the Department understands there are certain circumstances such as infiltration which may be permitted on a case-by-case basis. The Department agrees that groundwater and tidal infiltration is not a DWO, and the definition of "DWO" has been modified as described in **RESPONSE 6-10** of Section B of the Response to Comments document.

No change to the Final permit(s) is necessary as a result of this comment.

195. COMMENT: Part IV.F.5.d allows for CSO outfalls to be used for "other types of discharges to address extraordinary circumstances," but only with approval. This section should be clarified to indicate whether advanced approval is required (i.e., analogous to anticipated bypass). The Department should consider expressing this in terms of enforcement discretion rather than reserving "the right to allow" the use of the CSO outfalls for "other types of discharges." Finally, we suggest inclusion of an explanation in the Fact Sheet. [5] [11] [24]

RESPONSE 195: As described in **RESPONSE 6-10** of Section B of the Response to Comments document, the Department has modified the definition for "DWO." The Department will evaluate any requests for permission for a DWO or downstream connection on a case-by-case basis. As stated in Part IV.F.5.d, CSO outfalls to be used for other types of discharges to address extraordinary circumstances may only be done with Department approval.

In the event of an emergency, the permittee shall follow the upset/bypass provisions at N.J.A.C. 7:14A-6.10 and reporting of non-compliance shall occur in accordance with those requirements. For potential discharges that do not meet the provision of N.J.A.C. 7:14A-6.10, prior written approval from the Department is required.

No changes have been made to the Final permit(s) as a result of this comment.

Part IV Combined Sewer Management, Section F, NMC #6, Control of Solids/Floatables

196. COMMENT: Part IV Section F.6.d describes disposal requirements for captured debris from S/F facilities. At the end of this sentence please add "permit or in the case of mechanical screening, with approval by the NJDEP and the POTW, returned to the interceptor or trunk sewer for delivery to the POTW for proper disposal." [35]

RESPONSE 196: Part IV F.6.d is stated as follows:

> "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."

For those outfalls with mechanical bar screens that return the captured screenings back into the wastewater flow to be removed downstream at the STP, the permittee will not be collecting, measuring or weighing these screenings for disposal; therefore, the permittee will not be required to report the quantity of captured screenings from those units on the monthly MRF. Please see **RESPONSE 144** of Section A of the Response to Comments document for additional guidance.

The Department maintains that modifications to the permit language is unnecessary.

No changes have been made to the Final permit(s) as a result of this comment.

Part IV Combined Sewer Management, Section F, NMC #7, Implementation of Pollution Prevention Measures

197. COMMENT: PVSC requests that Part IV.F.7 be deleted from its Individual NJPDES permit (NJ0021016) in its entirety. PVSC does not own the local roadways, catch basins or collection systems. Therefore, this requirement is not applicable to PVSC. [42]

198. COMMENT: Regarding Part IV.F.7, because it owns and operates the CSO within North Bergen that is the basis for the Draft permit, NBMUA is the proper permittee; however, all permit requirements relating to components of the CSS that NBMUA does not own or operate must be removed. Part IV.F.7.a.i requires the permittee to implement a regular street cleaning program; this paragraph should be removed. NBMUA does not own the streets or the collection system in North Bergen Township or the Town of Guttenberg; this is the responsibility of the municipality. [33] [34]

199. COMMENT: Part IV Section F.7.a.ii requires the permittee to retrofit existing storm drains to meet the standards in Appendix B. Covering open throats on catch basins will require a large financial commitment as the NHSA has several thousand catch basins. The legal basis for this position is not known and needs to be identified. This requirement is limited to being performed when other roadwork is done (repaving, repairing, reconstruction). However, NHSA is not in charge of road paving projects and may not be informed when such work is being completed.

Part IV Section F.7.a.iii requires the permittee to implement stormwater pollution prevention rules and ordinances. The rules and ordinances are under the control of the individual towns and not NHSA. Also, this is not a NPDES requirement for POTWs. This requirement should be removed from the permit.

Part IV Section F.7.a.iv requires the permittee to implement solid waste collection and recycling ordinances. These programs and ordinances are under the control of the individual towns and not the NHSA. Also, this is not a NPDES requirement for POTWs. This requirement should be removed from the permit. [25]

RESPONSE 197-199: The Department has revisited this condition and has determined that Part IV.F.7.a needs to be modified for the NJPDES CSO permits issued to STPs to "encourage" pollution prevention measures as opposed to require such given that the STPs are not directly responsible for these conditions. Part IV.F.7.a has been revised in all NJPDES CSO permits issued to STPs as follows:

"7. Implementation of Pollution Prevention Measures

a. The permittee shall encourage municipalities to continue to implement and upgrade pollution prevention measures necessary to prevent and limit contaminants from entering the entire collection system owned/operated by the permittee that conveys flows to the treatment works. Unless demonstrated to the Department to be impracticable, measures shall include, but not be limited to, the following:…"

   i. Implementation of a regular street cleaning program.

   ii. Retrofitting of existing storm drains to meet the standards in Appendix 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 municipality. 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."

Although the STP permittees may not be directly responsible for one or more of the pollution prevention control measures in Part IV.F.7 (e.g. street cleaning, solid waste collection, or recycling), the STP permittees do have the ability to incorporate pollution prevention requirements into their rules and regulations and/or service agreements with the municipalities within their hydraulically connected sewer system. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

Note that Part IV.F.7.a.vi, which concerns "Enforcement of illegal dumping regulations," as contained in the draft permits is being renumbered as Part IV.F.7.b and has changed as described in **RESPONSE 203-204** of Section C of the Response to Comments document.

Note that Part IV.F.7.a.vii, which concerns the revision of applicable rules, ordinances and sewer use agreements to address the reduction of inflow and infiltration (I/I) into the collection system, as contained in the draft permits is being renumbered as Part IV.F.7.c and has changed as described in **RESPONSE 205-207** of Section C of the Response to Comments document.

This change affects Part IV.F.7.a in Final permits issued to CCMUA (NJ0026182), Trenton Sewer Utility (NJ0020923), JMEUC (NJ0024721), BCUA Little Ferry STP (NJ0020028), NHSA – River Road WTP (NJ0025321), NHSA – Adams Street WTP (NJ0026085), PVSC (NJ0021016) and MCUA (NJ0020141).

200. COMMENT: New Jersey's stormwater regulations and general permits for MS4 areas recognize the value of reducing the volume of runoff through inclusion of quantitative standards to limit the quantity of "post-construction" stormwater runoff from development projects and

through requirements that municipalities must implement these standards through local ordinances. According to the Fact Sheets accompanying the Draft permits, it appears that the Department intends to require the permittees to apply these same standards within CSS areas. The Fact Sheets state that the permittees must "extend applicable stormwater management practices, ordinances and rules to combined sewer areas of their towns." The Fact Sheet further explains: "This would mean the permittee should apply the same ordinances and rules in the combined sewer areas of the municipality as they apply in the separately sewered areas…"

The actual text of the Draft permits, however, does not appear to include such a specific requirement. Rather, the permit requires implementation of unspecified stormwater pollution prevention "rules and ordinances," without reference to extending existing ordinances and rules in separately sewered areas to the combined sewer areas. The Department should revise the permit language to state explicitly that a permittee must implement requirements in combined sewer areas that are at least as stringent as the stormwater rules and ordinances and rules applicable in separately sewered areas.

We urge the Department to improve upon the existing MS4 post-construction stormwater quantity standards both for purposes of these and other CSO permits, and for future iterations of the statewide MS4 general permits. [4] [16] [37] [38] [39]

RESPONSE 200: The Stormwater Management rules apply to both combined sewer areas and separate sewer areas. These rules are implemented statewide through the review of permits issued by the Department's Division of Land Use Regulation and are also implemented by local authorities through the Municipal Land Use Law (MLUL) and the Residential Site Improvement Standards (RSIS). As per Article 12, Storm Water Management Plan, in the Municipal Land Use Law, "Every municipality in the State shall prepare a storm water management plan and a storm water control ordinance or ordinances to implement said plan."

Permittees are responsible for implementing all rules and ordinances adopted in accordance with these statutes through the entire municipality. Therefore, permittees are required to implement stormwater management practices, ordinances and rules to both combined sewer areas as well as separately sewered areas of their municipalities.

Substantive changes to these programs are better addressed through the rule making process and public comment process on the MS4 permit renewal or other regulatory avenues.

No changes have been made to the Final permit(s) as a result of this comment.

201. COMMENT: The Department should modify the Draft permits to require stringent controls on the quantity of runoff from new development and redevelopment projects. To maximize the use of GI to reduce sewage overflows, municipalities must not only invest in GI retrofits on public property, but must also ensure that private development and redevelopment projects incorporate GI practices to reduce the volume of runoff into public sewers. Philadelphia's *Green City, Clean Waters* program presents a strong model where the city's CWA permits are being modified to include an enforceable long-term target of managing one inch of runoff from one-third of the impervious area in the city's combined sewer service area. The city's plan to

meet that requirement includes major investment in GI on public property as well as implementation of a local regulation requiring new development and redevelopment projects to infiltrate one inch of stormwater runoff onsite.

The Department should improve upon the existing MS4 post-construction stormwater quantity standards both for purposes of these and other CSO permits, and for future iterations of the statewide MS4 general permits. To reduce runoff from existing developed areas, stringent post-construction stormwater quantity standards must be applied not only to "new development" on previously undeveloped land, but also to "redevelopment" projects on sites that have been built-upon previously. New Jersey's current post-construction stormwater requirements for MS4 areas do not do so; rather, the state's standards include broad exceptions that generally allow redevelopment projects to continue discharging the same volume of runoff as the previous development on the site.

In contrast, other jurisdictions that are using post-construction stormwater regulations to help reduce CSOs, such as Philadelphia and New York City, apply their standards equally to new development and redevelopment projects. Similarly, MS4 requirements in other jurisdictions apply robust runoff reduction requirements to redevelopment. For example, EPA recently highlighted the MS4 permit for Washington, DC as a model, explaining that it "requires onsite retention of 1.2" of rainfall from all 24-hour storms for all new and redevelopment projects 5,000 square feet or larger, as well as for most retrofit projects.

We have included a comprehensive set of recommendations to strengthen the state's post-construction stormwater management performance standards in a petition to modify the MS4 general permits that is currently pending with the Department. We incorporate by reference the arguments in Section I.E.2 of that petition, which explain the need for a new "on-site retention standard" applicable to new development and redevelopment projects over 5,000 square feet in size. These Draft CSO permits should be modified to require the permittees to implement such a standard for all projects over which they have regulatory authority or direct control. [4] [16] [36] [37] [38] [39]

RESPONSE 201: The post-construction standards referenced in this comment are contained in the Stormwater Management rules at N.J.A.C. 7:8. Please refer to **RESPONSE 200** in Section C of the Response to Comments document regarding the applicability of stormwater pollution prevention plan rules and ordinances. Issues pertaining post construction stormwater management requirements as applied to municipalities should be addressed separately as part of the public comment process for amendments to the Stormwater Management Rules at N.J.A.C. 7:8.

No changes have been made to the Final permit(s) as a result of this comment.

202. COMMENT: If other municipalities discharge stormwater into combined sewers that connect to the regional utilities' STPs, those NJPDES permits should require those permittees to secure binding commitments from those municipalities that they will also apply stormwater management standards in combined sewer drainage areas that are at least as stringent as the standards applicable in separately sewered areas. [4] [37] [39]

RESPONSE 202: As described in **RESPONSE 200** of Section C of the Response to Comments document, the Department maintains that there is no need for binding commitments as the Department's Stormwater Management rules consistently apply to all municipalities in New Jersey. Please refer to **RESPONSE 201** above regarding the applicability of post construction standards to municipalities.

203. COMMENT: Part IV Section F.7.a.vi requires the permittee to enforce illegal dumping regulations. Illegal "dumping" by SIUs is covered by the pretreatment regulations. Illegal dumping by the general public is outside of the enforcement powers of a permittee. Please clarify the meaning and definition of "Dumping" and the regulations referred to in this section. [15]

204. COMMENT: Section F.7.a.vi requires the permittee to enforce illegal dumping regulations. NHSA has no means of enforcing such regulations. Enforcement should be left to the proper enforcement agencies. Also, this is not a NPDES requirement for POTWs. This requirement should be removed from the permit. [25]

RESPONSE 203-204: The Department agrees that the term "illegal dumping" is overly broad and requires refinement as to the Department's intent. Previously, Part IV.F.7.a.vi included the condition "Enforcement of illegal dumping regulations" as part of the pollution prevention measures. The Department has restated this condition as Part IV.F.7.b for municipal permittees as follows:

> "b. The permittee shall enforce street litter ordinances and rules and regulations on illegal connections and unauthorized discharge(s) into the POTW."

For STP permits:

> "b. The permittee shall enforce rules and regulations on illegal connections and unauthorized discharge(s) into the POTW."

As found in the EPA Combined Sewer Overflows "Guidance for Nine Minimum Controls" (EPA 832-B-95-003) dated May 1995. In Section 8.1.6 *Illegal Dumping*, of this guidance document, the EPA states that "Public education, notices in appropriate places, and enforcement programs can be used to control illegal dumping of tires, used motor oil, and other materials into waterways, storm drain inlets, catch basins, or onto the ground."

This change affects Part IV.F.7.b of the Final permits.

205. COMMENT: Part IV.F.7.a.vii requires the permittee to implement measures to reduce I/I where "feasible" unless "impracticable." This requirement is overbroad as such activity should only be required to the degree necessary to meet LTCP objectives. Moreover, it is inconsistent with the key requirements of the National CSO Policy. [25]

206. COMMENT: Part IV.F.7.a.vii requires permittee's pollution prevention measures to include "revision as necessary of applicable rules, ordinances and sewer use agreements to address the reduction of I/I into the collection system where feasible." Existing sewer use or capacity agreements cannot be modified unless agreed upon by both parties. [19] [25][26]

207. COMMENT: Because the permittee does not own or operate a CSS, please clarify what "rules, ordinances" are referred to in Part IV.F.7.a.vii. Sewer use agreements are between two parties and cannot be changed unilaterally by one of the parties. [15]

RESPONSE 205-207: In the Draft permits Part IV.F.7.a.vii read:

"vii. Revision as necessary of applicable rules, ordinances and sewer use agreements to address the reduction of inflow and infiltration (I/I) into the collection system where feasible."

The Department has revisited this condition and has determined that it needs to be clarified to reflect the Department's intent. As stated previously, Part IV.F.7.a concerns the implementation of pollution prevention measures. The revised provision is now incorporated as Part IV.F.7.c as shown below:

"c. The permittee shall submit a schedule to revise applicable rules, ordinances and sewer use agreements to address the reduction of inflow and infiltration (I/I) into the collection system in accordance with Part IV.F.1.h."

Please also see **RESPONSE 45-52** of Section C of this Response to Comments document, Part IV.F.1.h as it relates to this comment and response.

The removal of I/I from the entire collection system frees up storage capacity and/or conveyance capacity in the sewer system and/or treatment capacity at the STP; and thereby reduces the frequency, duration, and volume of CSO discharges during wet weather. The National CSO Policy at Part II.B anticipates that the permittee will study how to reduce I/I to show compliance with the NMCs. This requirement is also consistent with EPA's Guidance on the NMCs at Section 8.1.9, which recommends that permittees generally study how water conservation can reduce dry weather flows to the CSS and thereby increase the volume of combined sewage that can be retained in the CSS and treated at the STP. The permittee is also required under the National CSO Policy (Section II.C.4.) and N.J.A.C. 7:14A-11 (Appendix C, Section II.C.4) to consider a reasonable range of CSO control alternatives in the preparation of its LTCP that will meet the CWA requirements.

In Part IV.G.4.e.iv of the permit, the permittee is required to evaluate I/I reduction in the entire collection system as one of the CSO control alternatives. Other sections of the permit also address the requirement for permittees to identify and reduce I/I sources (Part IV.F.1.j.ii; Part IV.F.1.j.xii; and Part IV.F.7.c).

Sewerage authorities have broad authority to make and enforce bylaws, rules, and regulations for the use of their sewer systems. N.J.S.A. 40:14A-7(11); N.J.S.A. 40:14B-20(11); N.J.S.A.

58:14-35. The Department understands that modifying/revising sewer use agreements between authorities and municipalities, and between municipalities, for the purpose of reducing I/I may be challenging, however these agreements must reflect the permittees' obligations under the National CSO Policy and N.J.A.C. 7:14A-11 Appendix C and cannot be inconsistent with provisions of a duly-issued NJPDES permit. It is critical for permittees to revise such agreements cooperatively with member communities in the hydraulically connected sewer system to affect feasible reductions in I/I, and to summarize their progress in complying with this permit requirement in the CSO Progress Reports in accordance with Part IV.D of the permit.

Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

Regarding the request in this comment to clarify what is meant by "rules" and "ordinances," "rules" are those requirements in the "Rules and Regulations" of both authorities and municipalities while "ordinances" are those laws usually found in a code of laws for a government entity such as a municipality or an authority. Note that the reduction of I/I is also a requirement as part of the CAP program in accordance with N.J.A.C. 7:14A-22.16(a)2.

Regarding the issue that the permittee does not own or operate a CSS, please note that the fact that a permittee owns and operates a STP that receives combined wastewater flow from a combined sewer collection system by default means that STP is part of a CSS POTW.

This change affects Part IV.F.7.c of the Final permits.

208. COMMENT: Regarding Part IV.F.7.a.vii, because there is no definition for the term "where feasible" we suggest the following changes:

- "Revision ... address the reduction of Excessive Infiltration and Inflow (I/I)" as defined in N.J.A.C. 7: 14 A-1.2 Definitions."

- "Excessive inflow/infiltration" means the quantities of infiltration/inflow (I/I) which can be economically eliminated from a sewer system as determined in a cost effectiveness analysis that compares the cost for correcting the I/I conditions to the total costs for transportation and treatment of the I/I." [15]

209. COMMENT: There is no definition for the term "where feasible." We suggest the following change to Part IV Section F.7.a.vii: "Revision…address the reduction of excessive inflow and infiltration into the collection system as defined in 40 CFR Part 35.2005(16)." [6] [20] [29] [32] [33] [34] [35] [40] [42] [44]

210. COMMENT: Part IV Section F.7.a.vii. Reference to "infiltration and inflow (I/I)" should be revised to "excessive infiltration and inflow (I/I)" and "to the extent feasible" should be deleted. [28] [31]

RESPONSE 208-210: As described in **RESPONSE 205-207** in Section C of the Response to Comments document, Part IV.F.7.a.vii has been renumbered and revised and is now Part IV.F.7.c. The intent of this permit is to reduce quantity and duration of CSO discharges. To the extent that I/I contributes to such discharges, the permittee shall evaluate revisions to its applicable rules, ordinances and sewer use agreements to reduce I/I. For additional information on permit conditions relating to I/I please refer to **RESPONSE 45-52**; **RESPONSE 54**; and **RESPONSE 108-110** in Section C; and **RESPONSE 91-93** in Section D of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of these comments.

211. COMMENT: The Draft Elizabeth City, Perth Amboy City and Hackensack City CSO permits include four additional pollution prevention requirements that the regional wastewater utilities' Draft permits lack; namely requirements regarding the implementation of a regular street cleaning program, the retrofitting of existing storms drains, the implementation of solid waste collection and recycling ordinances, and the implementation of public education programs. While the regional utilities may not be able to directly implement street cleaning programs, storm drain retrofits (for any storm drains they do not own), and solid waste collection and recycling ordinances, they should have some ability to include related conditions in service agreements with individual municipalities. Additionally, the regional utilities do have authority to retrofit any storm drains they do own (if any) and to undertake public education efforts in regard to stormwater pollution prevention. The NJPDES CSO permits should require the utilities authority to do so. [37] [39]

RESPONSE 211: The Department acknowledges that some pollution prevention requirements were inadvertently omitted from three of the STP's CSO permits. As described in **RESPONSE 197-199** in Section C of the Response to comments document, the Department has revised the NJPDES permits for JMEUC (NJ0024741), MCUA (NJ0020141), and BCUA Little Ferry STP (NJ0020028) to include these requirements.

This change affects the Final permits for JMEUC (NJ0024741), MCUA (NJ0020141), and BCUA Little Ferry STP (NJ0020028) where Part IV.F.7.a has been modified so that it is consistent with all STP permits.

212. COMMENT: The Department should modify the Draft permits to require the regional utilities to work with municipalities within their service areas to improve local stormwater management and pollution prevention programs. NJPDES CSO permits have been issued to regional sewerage or utility authorities (e.g. JMEUC; MCUA; BCUA; NHSA (for the Adams Street and River Road WTPs); and North Bergen Township MUA (for the Woodcliff STP); and PVSC) as well as to municipalities that own CSO outfalls within the service area (e.g. Elizabeth City; Perth Amboy City; Hackensack City, Ridgefield Park Village and Fort Lee Borough). The regional sewerage or utility authorities do not have direct land use regulatory authority or direct authority over certain activities that influence the flow of polluted runoff into the CSS, such as street cleaning. However, these regional utilities presumably can exercise, through conditions imposed on their service agreements with individual

municipalities, significant influence over the activities of those municipalities that affect stormwater flow into the sewer system.

From the Draft permits and associated Fact Sheets, it is not clear whether other municipalities discharge stormwater into combined sewers that connect to the regional utilities' STPs. If they do, the permits for the regional utilities should require those regional utilities to impose conditions regarding stormwater pollution control and other pollution prevention measures through their service agreements with individual municipalities, to the extent feasible. [36] [37] [38] [39]

RESPONSE 212: The CSO Permit Program regulates CSSs and their corresponding CSO points through the issuance of individual NJPDES discharge to surface water permits. CSO NJPDES permits were issued by the Department to the following entities: municipalities which have both a CSS and at least one CSO; STPs having at least one CSO; and STPs not having any CSOs but which are hydraulically connected to at least one municipality with at least one CSO.

Municipalities not having any CSOs, although they may have a CSS, were not issued CSO permits since they do not have a discharge to surface water. STPs not having any CSOs, and not hydraulically connected to any municipality with at least one CSO, were also NOT issued CSO permits.

As described in **RESPONSE 197-199** of Section C of the Response to Comments document and as indicated in Part IV.F.7.a, the Department encourages regional utilities to work cooperatively with member communities to prevent pollution and reduce stormwater flow to the CSS. The Department has required all CSO permittees (municipalities and STPs), pursuant to Part IV.F.1.h, to review their rules, ordinances and sewer use agreements with both combined and separate sewer system municipalities and submit an anticipated schedule for revision within six months of the EDP, if necessary, to require the customer municipalities to: operate and maintain their treatment works, identify I/I and reduce it where appropriate, and identify and eliminate interconnections and cross-connections in storm sewers.

Additionally, the Department is requiring all CSO permittees to implement pollution prevention measures including the revision of applicable rules, ordinances and sewer use agreements to address the reduction of I/I, as per Part IV.F.7.c.

No changes have been made to the Final permit(s) as a result of this comment.

213. COMMENT: We recommend that the Department modify the permits to ensure that the permittees also consider water conservation measures as a complimentary CSO control strategy. [4] [16] [36] [37] [38] [39]

RESPONSE 213: The Department agrees that water conservation is an effective measure in reducing the amount of flow in a CSS and encourages all permittees to educate the community in this regard. Water conservation serves 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 DCA requirements. The implementation of water conservation is also a requirement as part of the CAP program in accordance with N.J.A.C. 7:14A-22.16(a).

Part IV Combined Sewer Management, Section F, NMC #8. Public Notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts

214. COMMENT: The NJPDES permits appear to adequately incorporate the NMCs required by the National CSO Policy. The improvements represent the minimum best practices required by law, so the Department should not entertain any effort to weaken adherence to these controls. However, the public notification requirements can be significantly improved. The National CSO Policy requires "public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts." The NJPDES permits require permittees to erect clear signage, post leaflets, send annual letters and maintain a telephone hot line or website. We support these changes, but feel they could be made better.

A good notification program will give the right people the information they need in the time to allow them to make informed decisions. The proposed requirements could be improved by taking extra steps to ensure that all river users receive the information, since many river users may not have access to telephone hot lines or websites. Washington DC uses a lighting system to provide on-site up-to-the-minute notification of when an overflow is occurring or has occurred in the previous 24 hours. While an up-to-date hot line is good, what would be even better would be a hot line that takes weather forecasts into account. [3]

215. COMMENT: The NJPDES provisions say the sign should be within 100 feet of the outfalls which seems like a small area. The people who are most exposed tend to be people of low means, subsistent, or homeless and are by the water because that is where they can go. A sign within 100 feet is much better than what we have now, but it would be better to have signs where the permittees have reason to think that effects from the outfall can be felt. CSO outfalls in Washington DC have a pipe lighting system so that when there is an outfall discharge there is a red light, and then for 24 hours after there is a yellow light. Such a lighting system ensures a localized and immediate notification to people on-site. [1] [46]

216. COMMENT: We should be able to find a way to notify the public when there's an overflow. If the towns are unaware and can't provide warning, then sewer separation seems to be the right answer. The fact that we haven't found a way to ensure notification is not a result of that it can't be done but that we haven't required it. [47]

RESPONSE 214-216: As noted in this comment, Part IV.F.8 concerns public notification requirements which were developed to ensure that the public receives adequate notification of CSO occurrences and impacts. These requirements can be summarized as follows: posting of CSO Identification Signs at every CSO outfall location; posting of leaflets/flyers/signs with general information at affected use areas (e.g. beaches, marinas, docks, fishing piers, boat

ramps, parks and other public places) within 100 feet of the outfall; notification to all residents by US mail or e-mail in the permittee's sewer service area regarding CSOs and the related threat to public health; and creation and maintenance of a telephone hot line or website to provide immediate/up to date information regarding CSO discharges. The Department's intent is for the permittees to provide up-to-date information to the public as to whether or not CSO discharges are occurring. Regarding the commenters suggestion for the use of weather forecasting, the Department maintains that the prediction of the amount of rain that will fall in any specific area may not be accurate under current weather forecasting.

The Department maintains that these measures are comprehensive and are in accordance with both the National CSO Policy as well as Chapter 9 of the EPA's "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995.

The Department recognizes that while some river users may not have access to the telephone hot line or internet, CSO notification signs serve to notify them at the actual outfall location. The Department acknowledges the benefits of the Washington DC lighting system. The Department maintains that the public notification requirements as contained in the NJPDES CSO permits are practical and sufficient for the purpose. The Department encourages, but will not require, permittees to consider similar systems for their CSOs. The NJPDES CSO permit NMC requirements are minimum requirements and the Department has no objections to additional notification measures such as a lighting system as suggested.

On this same issue, the Draft NJPDES CSO permits state that signs should contain International Standards Organization symbols prohibiting swimming, fishing and kayaking; however, the Department has since learned that there is no International Standards Organization symbol for kayaking. As a result, the Department has modified this requirement in the final NJPDES CSO permits where this condition is stated, in part, as follows:

"iv. …
- Signs that depict ~~International Standards Organization~~ symbols prohibiting swimming, fishing and kayaking."

This change affects Part IV.F.8.a.iv of the Final permits.

217. COMMENT: According to EPA estimates, New Jersey combined sewers discharge over 23 billion gallons of untreated sewage into state waters every year. Combined sewage typically contains pathogens that can be extremely dangerous, even life threatening, to human health. New Jersey currently has no way to alert residents that an overflow has occurred. Combined sewers are designed to overflow when stormwater overwhelms system capacity, and so typically occur only during or after rain or snowmelt. Most residents, however, know nothing of this danger and so they are unable to make informed decisions to protect themsleves and their families' health. While the public notification provisions in the Draft permit are a marked improvement over the status quo, they are incomplete.

Any good CSO notification program will accomplish three goals. First and foremost, it will let people know about overflows before they get in the water. Traditionally, swimmers are only warned after a water sample is cultured in a lab, a process that typically takes three or four days; which shows what water quality was like several days ago. The permits should be revised to require permittees to alert the Department of overflows based on weather forecasts before the overflows occur. For unexpected squalls, the permit should require permittees to inform the Department within an hour, letting New Jersey public health officials avoid water borne illnesses to the maximum extent possible.

Second, the notification must get to the people who can actually act on the information. Alerts do little good if they simply go into a Department database and gather dust. The Department should spread information to all interested parties so that useful information is conveyed to the public, the Commissioner of Health, town governments and parks departments within a useful time frame. The Draft permits currently require public notification, but not notification to local governments, parks departments or to the health commissioner.

Third, the information generated from notifications must be collected and analyzed so the data can help regulators and the public better understand the CSO problem. Permittees should submit a written report for each overflow and the Department should aggregate and process this information to produce a yearly report. This information would add to our understanding of an important environmental and public health problem so that we can respond to overflows in a considered, scientific and cost effective way.

The Draft permits are a welcome step forward, but do not represent a complete CSO notification plan. [7]

RESPONSE 217: As noted in **RESPONSE 214-216**, the Department does not agree that the use of weather forecasting is sufficiently reliable or precise for the purposes of predicting CSO events for public notification. The Department maintains that the use of appropriate monitoring and modeling (based on actual rainfall data) to determine when CSOs are active is an acceptable means to reliably inform the public of potential CSO events

Regarding the commenter's request that the public, the Commissioner of Health, town governments and parks departments be notified within one hour of potential overflow events, please note that up-to-date information will be available on a website or 24 hour hot line. The Department maintains that the local permittee is the most appropriate entity to manage and disseminate this information in the most timely manner. These requirements provide a mechanism to disseminate information to any interested parties in an expedient manner.

Finally, the Department is unclear regarding the contention that the information generated from notifications can be collected and analyzed to help regulators and the public better understand the CSO problem that will be used to inform the LTCP process. The NJPDES CSO permits contain a myriad of requirements pertaining to CSO characterization and their effects on water quality under the LTCP section of the permit (Part IV.G). This information, once submitted, is available to the public through the Department's OPRA office. Note that these

requirements are separate and distinct from the public notification requirements. Requirements pertaining to the website or hot line ensure that timely information is available to the public.

No changes have been made to the Final permit(s) as a result of this comment.

218. COMMENT: The Department should require signage not just on the outfall, but up and downstream from the outfall in areas typically affected by sewage. While the Draft permit requires signage visible from 100 feet of the outfall, dangerous levels of pathogens can exist a greater distance from the outfall. Signs should be placed not just at the outfall, but at areas farther down from the outfall such as areas where there is a fishing pier. This would ensure that people who can't see the outfall are put on notice to be concerned. The signs should also make it clear that the danger is highest after a rainfall by stating that contact with water should be avoided after rainfall. [7] [46]

219. COMMENT: The permit requires the posting of signage to be within 100 feet of the outfall. This is not practical as in some cases the most feasible location is farther than 100 feet. We suggest that the requirements be changed to within a reasonable distance of the outfall. [27]

RESPONSE 218-219: Part IV.F.8.a.i is stated as follows:

"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."

Part IV.F.8.a.i does not require signage on the outfall or "visible within 100 feet of the outfall", as suggested in these comments, but rather "within 100 feet of the outfall." The required signs must depict a prohibition against swimming, fishing, and kayaking. The NJPDES CSO permits also require the posting of leaflets/flyers/signs with general information at affected use areas within 100 feet of the outfall. The Department maintains that these requirements are adequate to notify the public of the location(s) of the CSO outfalls and the dangers associated with the use of the waterway as a result of wet weather events.

No changes have been made to the Final permit(s) as a result of these comments.

220. COMMENT: Senate Bill S831, which had been passed by both houses, expired without the governor's signature. S831 contained important public health and notification measures that are not present in the Draft permits. S831 covered where dangerous levels of pathogens could be expected after a rainfall based on a case study. If the information is available before the pathogens are in the water, it allows people to make choices. The Department should maximize the protectiveness of the permits by incorporating the additional protections from S831.

S831 requires notification not just to the Department, but also to the towns, parks, departments, health commissioners and other people that might find the information useful. One CSO outfall in Hackensack is a popular fishing area, whereas the other CSO outfall in Hackensack is

a park. Notification to the Hackensack Parks Department regarding the fact that a model shows that a CSO could occur the next day would allow them to provide an on the ground response. Similarly, the Perth Amboy CSO outfalls are on the beach and look like piers. The vast majority of people in Perth Amboy probably do not know they are dangerous. The person in charge of that beach, whether it be the Health Department or the Parks Department, should be aware of CSOs to ensure public safety. This would be a better system than putting the information on a website. [7] [46]

RESPONSE 220: The Department maintains that the NJPDES CSO permits require extensive and comprehensive public notification requirements which go far beyond simply posting information on a website. The requirement to post signs within 100 feet of the CSO outfall and at affected use areas will serve to notify beach users of the presence and dangers of CSOs. Please refer to **RESPONSE 217** and **RESPONSE 218-219** in Section C of the Response to Comments document for additional information.

No changes have been made to the Final permit(s) as a result of this comment.

221. COMMENT: Can the additional information required by Section F.8.c.i be included on the outfall pipe? Does the installation of the outfall signs with the additional information satisfy the requirement of Part IV.F.8.c.i.? [35]

RESPONSE 221: It is important to note that many CSO outfalls are submerged. As noted in **RESPONSE 220** in Section C of the Response to Comments document, Part IV.F.8.a itemizes the required information for the CSO Identification Signs. The Department maintains that the permit requirements contain a comprehensive strategy to disseminate the appropriate information in a variety of ways.

No changes have been made to the Final permit(s) as a result of this comment.

222. COMMENT: Notifying "all residents" by mail or email on an annual basis as to Newark's efforts to reduce/eliminate CSOs is not a reasonable use of public funds given Newark's population of 277,140. The requirement should be changed to a requirement to update the city's website to provide the specified information.

Part IV.F.8.cii should be revised to provide that Newark shall send notification to all residents who are included in its database of customers receiving water/sewer bills. Annual notice can be mailed to this customer list; this customer list consists of home owners, building owners, and landlord non-occupied multi-family properties so it does not include "all residents" of Newark. [35]

223. COMMENT: Under Part IV.F.8.c.ii it states that Elizabeth City must notify by mail or email all residents of Elizabeth City (population 125,000) and the Department regarding Elizabeth City's effort to reduce/eliminate CSOs on an annual basis. This is not a reasonable use of funds. We suggest changing this to "update the City's website as to projects being developed

and implemented to reduce/eliminate CSO discharges." This would also serve as a location for complying with "iii". [12]

RESPONSE 222-223: The Department agrees with the commenters that providing notification with sewer/water bills is an appropriate means of public notification. Note that notification may not be required for all residents in the municipality, but rather just those residents that are in the permittee's sewer service area. Specifically, this permit condition concerns notification to residents and is revised as follows to reflect formatting changes (where referenced sections may vary):

"ii. Notification to all residents by either US Postal Service or email, (with copies sent to the NJDEP at the address listed in C.1.e.i.~~b~~ or by email in D.l.f~~d~~), in the permittee's sewer service area providing additional information as to what efforts the permittee has made and plans to continue to undertake to reduce/eliminate CSOs and related threat to public health. Updated notifications shall be mailed on an annual basis."

The Department encourages the distribution of this information with water/sewer bills, trash pick-up or recycling schedule, or other routine mailings that already take place to conserve on costs. The Department maintains that a mailing or email in concert with the availability of a telephone hot line or posting on a website offers a comprehensive strategy to ensure that all citizens are notified through some method. The Department maintains that all these methods are necessary to maximize effectiveness and that the funds necessary to complete this requirement are not burdensome, particularly if the information is incorporated with other notifications.

This change affects Part IV.F.8.b.ii of the Final permits.

224. COMMENT: Part IV.F.8 addresses "public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts." Any new public notification requirements should allow for a schedule of compliance. [25]

RESPONSE 224: The Department did incorporate a 12 month compliance schedule for the creation of a telephone hot line or website. The Department also incorporated a 6 month schedule of compliance for the posting of CSO Identification Signs within 100 feet of the outfall. The Department is also requiring an annual notification to residents by mail or email. The Department maintains that the time needed to comply with these requirements is minimal and that the costs are not excessive.

No changes have been made to the Final permit(s) as a result of this comment.

225. COMMENT: Part IV.F.8.c.iii. requires that on or before EDP +12 months that the permittee create and maintain, on a daily basis, a telephone hot line or website for interested citizen inquiries to provide immediate/up-to-date information regarding where CSO discharges may be occurring, or that no discharges are occurring.

These are not CWA requirements and the existing data confirms that there are no water quality concerns. Section D of Introduction to the National CSO Policy recognizes that small systems (jurisdictions with populations under 75,000) have limited resources and may not need to complete each of the formal steps outlined in the National CSO Policy. There is no practical way for the permittee, as a small system, to comply with this requirement to provide immediate/up-to-date notifications of when CSOs may or may not be discharging. Therefore, this requirement is inappropriate and should be deleted in accordance with the National CSO Policy. [19] [25] [26]

226. COMMENT: Part IV.F 8.c.iii requires continuous real time monitoring of CSOs and immediate public notification of overflows. This requirement appears to presume that qualified staff are available 24 hours per day seven days per week to monitor the outfall and make the immediate public notification. Many CSO communities do not have 24/7 operations support staff. Complying with this requirement will require costly overtime and perhaps additional staff. EPA NMCs Guidance does not suggest 24/7 real time monitoring for public notification. Given that there are no bathing beaches in the vicinity of the CSO outfall, can public notification timing be less rigorous to work within the permittee's current staffing levels? [28] [31]

227. COMMENT: Permittees should be required to have both telephone hot lines AND an updated website, not one or the other. Permittees should also offer text notifications for overflows and should provide, where possible, on-the-ground notification for overflows perhaps using flags or lights. Information on the hot line and website should also include when the last overflow occurred as the danger from overflows may persist long after the overflow has concluded. Inaccurate information on the website or hot line should be treated as a violation of permit terms. [43]

228. COMMENT: With respect to "telephone hot line or website," what is the NJDEP Platform? [35] [42] [44]

229. COMMENT: An appropriate model should be able to predict when an overflow is likely and, if you operate a CSS, you should know how much rain typically triggers an overflow. If a National Weather Service forecast predicts a third of an inch of rain, and this amount of rain is expected to trigger a CSO, then the public can be called 24 hours ahead of time. A model that could do this more accurately would be preferable. The use of modeling for recreational notification will soon be expanded by EPA which is for the best. [46]

230. COMMENT: The public notification requirements will be very difficult to meet for municipalities such as Ridgefield Park. Ridgefield Park has six CSO outfalls but is a very small town. While we have models at this point that can provide some predictive capabilities, they are not perfect. Models need input data, such as rainfall intensity, which varies over the area, so it is not just a matter of volume. Rainfall monitoring is needed to be put it into the model, then the model must be run, then you have to see if and when the overflow occurs. Models can be used as a predictor, but it may or may not be accurate. There is also an issue related to the timing involved in trying to get this information out every day of the week which will be very difficult. The requirements

result in someone monitoring rainfall on a continuous basis and then putting that information into a model on a continuous basis seven days a week.

A rainfall of about a half an inch is probably going to cause a discharge somewhere, and a rainfall of a quarter of an inch or a third of an inch during the daytime may cause an overflow also. So from a practical standpoint, rainfalls of less than half an inch typically do not cause overflows or they may cause short duration overflows. It is almost impossible to try to predict when a CSO may occur at this point in time. [47]

231. COMMENT: Regarding Section F.8.c.iii, the determination of CSO discharges is permitted to be either "directly monitored or predicted using a DEP approved up-to-date model." It is only possible to have a simplified model that shows that CSO discharges may be occurring based on previously determined general relationships between rainfall and overflows. [42] [44]

RESPONSE 225-231: Part IV.F.8.b.iii (formerly Part IV.F.8.c.iii) describes the criteria for the telephone hot line or website. The Department agrees that the use of the term "platform" as it relates to a website description is unclear and has revised this requirement as follows in the Final permits:

"iii. On or before EDP +12 months the permittee shall create and maintain on a daily basis a telephone hot line or website (in an approved open source and/or syndicated format that is compatible with NJDEPs computer systems) ~~(using the same platform as NJDEP)~~ for interested citizen inquiries to provide ~~immediate/~~up-to-date information regarding where CSO discharges may be occurring or that ~~no~~ discharges are not or are unlikely to be occurring."

Regarding the questions about continuous real time monitoring, the Department has deleted the word immediate to clarify its intent. The Department agrees that modeling could prove useful for the purposes of the public notification requirements in predicting when a CSO discharge may occur. Modeling completed under the previous MGP may be evaluated and utilized for this purpose if appropriate. Whether a CSO is occurring may be determined by visual inspection, flow monitoring or other physical monitoring but also may be achieved by correlating the system model with rain data. Using the model, a table may be generated that correlates rainfall with the predicted operation of one or more CSOs. The permittee may compare daily rain gauge data (or forecasts) with this table and update the website or hot line on a daily basis. The permittee can periodically revise the table as significant CSO control measures are implemented. It is also acceptable for the permittee to monitor overflows remotely through an automatic system.

Regarding the suggestion that municipalities of a certain size should be exempt from these requirements, the National CSO Policy suggests that jurisdictions with populations under 75,000 "may not need to complete each of the formal steps outlined in Section II.C," the long term control plan, "but should be required through their permits . . . to comply with the nine minimum controls (II.B)." There is no exemption for small communities from the requirement to provide adequate and timely public notice of CSO events. NMC #9 already requires all communities to monitor for CSO events and for the apparent impacts of CSOs

through visual inspections and other simple methods. See EPA's "Guidance for Nine Minimum Controls" (EPA 832-B-95-003), dated May 1995, at Chapter 10. NMC #8 does not require additional monitoring or staffing beyond what is already required of CSO owners by NMC #9. Moreover, because DWOs are categorically prohibited and must be eliminated, the Department anticipates that the effort to monitor CSOs will occur primarily during wet weather events, and that as the NMCs are implemented and CSO events reduced, monitoring by visual inspections will be required less frequently as a result of the permittees' other efforts.

The Department does not agree that a telephone hot line and website should be simultaneously required to provide the same information. The National CSO Policy does not prescribe specific measures, it does require public notification, and a hot line or website serves to allow the public access to daily information. In EPA's "Guidance for Nine Minimum Controls" (EPA 832 B-95-003) at Section 9.1, EPA recommends notices in newspapers and radio and TV news programs or use of a telephone hot line. In light of technological advances since 1995, the Department has elected to allow permittees the choice of a hot line or a website to disseminate information about overflows in a manner comparable to EPA's recommendations. Considering the widespread use of websites by municipalities, the option to post alerts and notifications online is not anticipated to impose a significant technological burden on the permittees. The Department notes that commenters Ridgefield Park, Bayonne, Fort Lee, and Kearny all have municipal websites that offer regularly updated notices and alerts to the public about municipal news and events. The Department does not require that a hot line be staffed 24 hours a day similar to a 911 call center, hence the deletion of the term "immediate." Rather, the permittee is expected to update the hot line or website on a daily basis with a recorded message regarding whether or not any CSO discharges may be occurring, or that no discharges are occurring.

The Department does not agree that it is necessary for the Department to require permittees to offer text notifications for overflows. The requirement for a hot line or website affords interested members of the public the ability to query the information. On-the-ground notification is provided through the CSO Identification Signs as well as the other required measures.

This change affects Part IV.F.8.b.iii of the Final permits that contain public notification requirements.

232. COMMENT: Will we be required to let upstream or downstream water purveyors know that we are having a wet weather or dry weather discharge? [2]

RESPONSE 232: The NJPDES CSO permits as currently written do not require NJPDES CSO permittees to notify upstream and downstream water purveyors of a CSO discharge. In the event that there is a potable water intake located downstream of a CSO outfall, water purveyors should already be aware of their presence and manage the source accordingly. Rather, the Department provides water purveyors copies of NJPDES CSO permits as a part of its routine permit distribution. Water purveyors can access either the hot line or website for up-to-date information similar to members of the public.

No changes have been made to the Final permit(s) as a result of this comment.

233. COMMENT: The permittee does not own or operate the CSS, regulators, or outfalls. Therefore, delete this section in its entirety. [15]

RESPONSE 233: This comment was made on permits issued to MCUA (NJ0020141) and JMEUC (NJ0024741) where Part IV.F.8 states:

"8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts

a. Since the permittee does not own and/or operate any CSO outfalls, this proposed permit action does not include the requirement to ensure that the public receives notification of CSO occurances and impacts at this time."

This language was included in permits for STPs that do not own or operate CSO outfalls. The Department maintains that this language as written conveys the message that the STP does not own and/or operate any CSO outfalls and maintains that deletion is unnecessary.

No changes have been made to the Final permit(s) as a result of this comment.

234. COMMENT: Replace "Since the permittee does not own and/or operate any CSO outfalls, this proposed permit action does not include the requirement to ensure that the public receives notification of CSO occurrences and impacts at this time." with "The permittee shall coordinate with other permittees within the hydraulically connected system for the public notification process to ensure that the public receives adequate notification of CSO occurrences and CSO impacts." [11] [18] [24]

RESPONSE 234: The Department maintains that it is appropriate to have a different set of NMC permit conditions for municipal CSO permittees that own/operate CSO outfall(s) versus STPs that do not own or operate CSO outfall(s) as described in further detail in **RESPONSE 237** of Section C of the Response to Comments document. The public notification requirements are specific responsibilities assigned to the CSO owners and the Department maintains that it is inappropriate for the STP to mandate public notification requirements where they are not the responsible party.

This is consistent with EPA's National Strategy, which directs permit administrators to "specifically define the responsibilities and duties of each owner and operator" when different parts of a single CSS are owned and operated by more than one permittee. 54 Fed. Reg. at 37372. However, the Department does support a coordinated approach to public notification and believes that if one entity, such as the receiving STP, provides the website or hot line for members of the hydraulically connected communities, that this would be preferable to individual websites.

No changes have been made to the Final permit(s) as a result of this comment.

Part IV Combined Sewer Management, Section F, NMC #9. Monitoring to Effectively Characterize CSO Impacts & the Efficacy of CSO Controls

235. COMMENT: Part IV Section F.9 addresses monitoring NHSA must undertake "to effectively characterize CSO impacts and the efficacy of CSO controls." This provision is excessive. The data confirms that water quality impacts are not occurring due to the CSO outfalls. Therefore, increased monitoring should not be required. [25]

RESPONSE 235: While the specific language in Part IV.F.9.a varies amongst NJPDES CSO permittees, Part IV Section F.9.a in the NHSA NJPDES permits for the Adams Street WTP (NJ0026085) and the River Road WTP (NJ0025321) states:

"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, time duration, rainfall, location of rain gauge and quantity of solids/floatables removed for each CSO and discharge event through appropriate modeling or by an appropriately placed flow meter/totaling device, level sensor, or other appropriate measuring device, and report the required information on the DMR as required by Part III of this permit."

The Department does not agree that the requirements in Part IV. F.9 are "excessive" and does not agree that "increased monitoring should not be required." The monitoring requirements noted in Part IV, Section F.9.a. of the permit are simply a restatement of the information already required to be reported on a monthly basis as included in Part III of the permit. This information can be summarized as follows: the total volume of S/F removed from ALL outfalls when the solid waste is measured for disposal; the precipitation from a rain gauge representative of the area; and the duration of discharge for EACH CSO outfall as a whole day for any calendar day when a discharge occurs.

Regarding the statement that "The data confirms that water quality impacts are not occurring due to the CSO outfalls," the Department maintains that it is premature to make a determination prior to baseline ambient monitoring for the LTCP as required by Part IV.G.1 and Part IV.G.9. It also must be noted that in receiving waters where the water quality classification has been downgraded to either Saline Estuary 2 (SE2) or Saline Estuary 3 (SE3), these waters are no longer considered to be suitable for "primary contact recreation" (i.e., swimmable), and do not meet the goals of the CWA, National CSO Policy, and N.J.A.C. 7:14A-11 (Appendix C). However, the requirement under Part IV.F.9 to determine the efficacy of implemented CSO control measures also applies to the installation of technology-based controls.

No changes have been made to the Final permit(s) as a result of this comment.

236. COMMENT: Under Part IV Section C.1.b. of the NJPDES permit for the City of Newark (NJ0108758), the City of Newark is required to report the total S/F removed for all CSOs on

the first DMR (MRF), but in Part IV Section F.9.a the City of Newark is required to report the solids removed for each CSO on the DMR. Please reconcile these two requirements.

Also, some of Newark's CSO outfalls provide S/F control through the use of mechanical screens with the S/F collected and returned to the PVSC Interceptor as approved by the PVSC and as funded through an NJEIT Loan or by the NJDOT. These volumes of S/Fs removed from these CSOs are not measured, weighed or calculated and therefore cannot be reported in the monthly monitoring report.

Finally, the NJPDES permit in this section refers to the DMR and in other Sections refers to MRF but both appear to be the same form. Are the DMR and the MRF the same or different forms? [35]

RESPONSE 236: Pursuant to Part IV, Section C.1.b. and Part III (under the "Comments" section for Monitored Location 002A) of the City of Newark's permit, the permittee is required to report the combined total volume of S/F removed from ALL outfalls. This information shall be totaled then included on the MRF for the permittee's first CSO outfall when the S/F solid waste is measured for disposal. In other words, the permittee is not required to individually report the amount of S/F collected for each outfall, but rather is required to sum the total of S/F collected from ALL outfalls. As described in **RESPONSE 137-143** of Section A of the Response to Comments document, Part IV.F.9.a is not intended to require any additional reporting as compared to what is already contained in Part III. Rather, Part IV.F.9.a is intended to provide additional information as to how to measure the required information in Part III.

The Department recognizes that the City of Newark has CSO outfalls which have mechanical bar screens that return the captured screenings back into the wastewater flow to be removed downstream at the STP. For this scenario, the City of Newark is not collecting, measuring or weighing these screenings for "disposal." Rather, these screening are returned to the wastewater flow where they are likely collected and disposed of by the STP and reported accordingly. Therefore, the City of Newark will not be required to report the quantity of captured screenings from those units on the monthly MRF.

The monthly monitoring reporting form used by the permittee to report the total volume of S/F removed from all outfalls, Precipitation, and the Duration of Discharge is a DMR. The DMR is one type of MRF used by the Department for the reporting of self-monitoring results by permittees. To be consistent with the terminology used by the Department in Part IV, Section C.1. and Section E.3 of the permit, the Department has changed "DMR" in Part IV.F.9.a. of the permit to "MRF". The Department has also determined that with respect to the duration, this language should be revised to clarify that "duration of discharge" is the appropriate term consistent with Part III. The revised language is:

"a. The permittee shall monitor the CSO discharge events and record the date, "duration of discharge" ~~time duration~~, rainfall, location of rain gauge and quantity of solids/floatables removed for each CSO and discharge event through appropriate modeling or by an appropriately placed flow meter/totaling device, level sensor, or other appropriate

measuring device, and report the required information on the MRF ~~DMR~~ as required by Part III of this permit."

This change affects Part IV.F.9.a of those NJPDES CSO permittees that have CSO outfall(s).

237. COMMENT: Part IV Sections F.5 (Dry weather overflows), F.6 (Floatables), F.8 (Public notification of CSO) and F.9 (CSO Monitoring), recognize that JMEUC has no responsibilities in these areas. Other sections should be similarly limited given the scope of JMEUC responsibilities. [9]

RESPONSE 237: Since JMEUC does not own and/or operate any CSO outfalls, the Department had incorporated the language "Since the permittee does not own and/or operate any CSO outfalls, this proposed permit action does not include the requirement…." into Sections F.6, F.8 and F.9 for the NJPDES permit for JMEUC (NJ0024741) (as well as the other STP permittees that do not own/operate CSO outfalls). The purpose of this language is to denote that JMEUC is not required at this time to: control S/F from CSOs (Part IV, Section F.6.); ensure that the public receives notification of CSO occurrences and impacts (Part IV, Section F.8.); and to characterize CSO impacts and controls (Part IV, Section F.9.). As described in **RESPONSE 187** of Section C of the Response to Comments document, the DWO permit condition has been revised for STPs who do not own/operate CSO outfalls.

However, as an owner/operator of a portion of a collection system, and a STP that receives combined sewage from a contributing municipality (City of Elizabeth) in the JMEUC's hydraulically connected sewer system, the Department maintains that the remaining NMC requirements are appropriate and have been included which are as follows: proper operation and regular maintenance programs for the sewer system (Part IV, Section F.1.), maximum use of the collection system for storage (Part IV, Section F.2.), review and modification of pretreatment requirements to assure CSO impacts are minimized (Part IV, Section F.3.), maximization of flow to the POTW for treatment (Part IV, Section F.4.), prohibition of DWOs (Part IV, Section F.5) and implementation of pollution prevention (Part IV, Section F.7.)

The Department maintains that JMEUC must comply with these noted sections because it is the owner/operator of the STP and other parts of the combined sewer system that the City of Elizabeth conveys their combined sewage through. Therefore, JMEUC is responsible for the effects that the operation of the JMEUC's STP, and other parts of the JMEUC owned/operated collection system (trunk sewers, interceptor sewers, manholes, force mains, pump stations, and/or regulators) has on the ability of City of Elizabeth to convey its combined sewage to the STP for treatment and consequently, on the frequency, duration and volume of combined sewage that the City of Elizabeth discharges via their CSO outfalls. Please refer to **RESPONSE 236** of Section C of this Response to Comments document for additional information as well as to **RESPONSE 26-42** of Section A of the Response to Comments document for additional information.

No additional changes have been made to the Final permit(s) as a result of this comment.

238. COMMENT: EPA suggests replacement of "Since the permittee does not own and/or operate any CSO outfalls, this proposed permit action does not include the requirement to characterize CSO impacts and controls at this time." with "The permittee shall coordinate with other permittees within the hydraulically connected system for monitoring to effectively characterize CSO impacts and the efficacy of CSO control." [11] [18] [24]

RESPONSE 238: As noted in the **RESPONSE 237** of Section C of this Response to Comments document, this phrase was included in Part IV.F.9.a of the BCUA, PVSC, MCUA, and JMEUC NJPDES CSO permits. Although the Department fully supports the STP permittees who do not own/operate CSO outfalls coordinating with those permittees that do own/operate CSO outfalls within their hydraulically connected sewer system in order to fulfill their obligations under this section, as well as other sections of the permit, the Department does not believe that it is necessary to include EPA's suggested language in this specific section. The issue of coordination for permittees within the hydraulically connected system is covered in multiple other areas of the NJPDES CSO permit and is explicitly addressed in Part IV.G.10. For example, Part IV.G.1 and Part IV.G.9 contain comprehensive requirements pertaining to monitoring in a far more robust fashion where these LTCP requirements are included in all NJPDES CSO permits. The Department also wishes to make clear that that Sections F.5, F.6, F.8 and F.9 do not apply to the STP permittees that do not own/operate CSO outfalls at this time.

No changes have been made to the Final permit(s) as a result of this comment.

239. COMMENT: Part IV Section H.9 of PVSC's permit states that PVSC doesn't need to monitor to characterize CSO impacts and the efficacy of CSO controls. However, as the STP for upstream CSO permittees, PVSC is in a position to supply data on the impacts of the other permittees' changes. PVSC could report on reductions in volume during precipitation, and could report on its ability to process volume in order to understand the limitations of the system that all upstream permittees must work within. [43]

RESPONSE 239: The Department recognizes that STPs will be collecting data that could document the effects of changes as a result of the implementation of the permit conditions. This will be helpful to all permittees in the hydraulically connected system and meets the spirit of the single coordinated LTCP. However, regarding this comment as summarized above, the Department believes that the commenter is referring to Part IV.F.9 of the PVSC NJPDES permit (NJ0021016) since Section H.9 does not exist.

Even though the PVSC, MCUA, JMEUC and BCUA do not own or operate any CSO outfalls, they, as well as the other STPs, are in a position to monitor:

- Reductions in debris removed at the STP as a consequence of the implementation of pollution prevention measures (Part IV Section F.7.a.i. through vi.) by permittees in their hydraulically connected sewer system;

- Reductions in the average dry weather and peak wastewater flows received at the STP as a consequence of permittees in the hydraulically connected sewer system implementing CSO control measures.

No changes have been made to the Final permit(s) as a result of this comment.

Section D – LTCP #1 - #9

Part IV, Combined Sewer Management, Section G, LTCP #1. Characterization, Monitoring & Modeling of the Combined Sewer System

1. **COMMENT:** Part IV.G.1 identifies a series of studies that need to be conducted/updated/re-evaluated to characterize the collection system (Part IV.G.1.a) and CSO discharges. Many of the studies identified are 20 years old. These efforts will require considerable time and coordination with the Department to ensure that the data and information meets the Department's objectives. An appropriate schedule of compliance must be established after the parties have agreed on which studies require updated information and analyses.

   The previous drainage area models developed were limited to major transport facilities and interceptor sewers due to the lack of detailed system data, including manhole rims and invert elevations. The development of detailed system data and GIS mapping is required under this permit and thus, should be available for improvement of the model. Nevertheless, it is anticipated that this information may not be available to allow completion of the Characterization Study within the schedule as provided within the permit. [19] [25] [26]

2. **COMMENT:** Generally, the drainage models produced under the prior General CSO permit were limited to major transport facilities and interceptor sewers due to the lack of detailed system data. The Draft permit requires GIS mapping of the CSSs. The GIS data gathered under this permit could be utilized to improve upon these models. The current schedule for submittals does not allow permittees to incorporate the new GIS data into the existing models. PVSC requests that the Department revise the submittal milestones under this permit to allow permittees to improve upon the previous models by incorporating GIS data, if they choose to do so. [42]

   RESPONSE 1-2: The Characterization Studies are the foundation for the development of the LTCPs, and their quality and accuracy are fundamental to the success of the permittees' LTCP. The Department maintains that a proper characterization of all of the aspects that affect, or are affected by, the CSO outfalls, including rainfall, the collection system(s), the STP, and the receiving waters, will be critical in determining the most cost-effective CSO controls that will satisfy the National CSO Policy and the permit requirements. The Characterization Studies do have due dates associated with their submittal, where the due dates have been extended for both the work plan (EDP +6 months) and the system characterization (EDP +24 months for separate LTCPs and EDP +36 months for single coordinated LTCPs). Please refer to **RESPONSE 153-158** and **RESPONSE 159-164** in Section B of the Response to Comments document as well as Part IV.D.3 of the permit for a detailed summary as to the required timeframe.

The NJPDES CSO permit requires submission of GPS latitude and longitude coordinates for all CSO regulators, pump stations and CSO outfalls owned/operated by the permittee where the timeframe was extended from EDP +4 months to EDP +6 months as per the CSO Submittal Summary. Additionally, the permit requires completion of a PDF of a sewer map depicting the locations of the separate and combined sewers, CSO regulators, pump stations and outfalls owned/operated by the permittee by EDP +6 months. Because the System Characterization Work Plan for the LTCP, as per Part IV.G.1.a, is also due at EDP +6 months, the GPS information and sewer map are due at the same time. Therefore this information should be available in time for the final System Characterization Report due at EDP +24 months or EDP +36 months. Please note that the requirement for manhole rims, invert elevations has been deleted from Part IV.F.1.f as described in **RESPONSE 14-22** of Section C of the Response to Comments document for NMC #1. Please refer to the CSO Submittal Summary.

No changes have been made to the Final permit(s) as a result of these comments.

3. COMMENT: Regarding Part IV.G.1.a, it is not possible to comment on guidance that does not exist yet. If the Department is going to require NBMUA to perform ambient monitoring in accordance with specific guidance, NBMUA requests the opportunity to review and comment on the guidance. Therefore, either eliminate this paragraph, or re-propose it along with the guidance in order to provide the opportunity for review and comment. The need for ambient monitoring will depend greatly on whether a "Presumption" or "Demonstration" approach is utilized. We recommend that the Department simply state: "Ambient in-stream monitoring shall be performed as needed in accordance with the approach selected for demonstrating compliance." [33] [34]

4. COMMENT: Paragraph a references a guidance document which is "to be determined." The Town of Guttenberg cannot be expected to comply with that unknown requirement. [29]

5. COMMENT: When will the ambient in-stream guidance document be available? [35]

6. COMMENT: The in-stream guidance document and website link is not given in Part IV.G.1.a. [9] [12]

7. COMMENT: Ambient in-stream monitoring requirements are terrific since one of the problems is that we do not know the extent of the problem. Obtaining more data will help to deal with the problem and will serve everyone. [13]

8. COMMENT: EPA suggests that the following provision be added to Part IV. G.1, "The permittee shall work in coordination with the CSO community and all other direct/indirect contributors which are hydraulically connected to the STP, for appropriate Characterization, Monitoring and Modeling of the Sewer System." [11] [24]

RESPONSE 3-8: Subsequent to release of the Draft NJPDES CSO permits, the Department completed and released the guidance document entitled *Receiving Waters Monitoring Work Plan Guidance for the CSO Program* which is available on the DWQ website at

www.state.nj.us/dep/dwq. This guidance document provides a framework for sampling plans to satisfy ambient monitoring requirements as required by the NJPDES CSO permits. Prior to finalizing the document, the Department provided a copy to all NJPDES CSO permittees in order to gain technical input. These comments were carefully considered prior to finalization of the document.

Part IV.G.1.a as contained in the Draft permits has been reformatted as Part IV.G.1.a through Part IV.G.1.c. Regarding EPA's suggestion for modified language for Part IV.G.1, the Department agrees that coordination is required and has modified this section to clarify this condition. Part IV.G.1.a also references Part IV.D.3.a which contains similar language to what was suggested. In addition, the Department has added a new provision at Part IV.G.10 to describe the roles of the permittee in situations in which the permittee does not own/operate the entire CSS as described in further detail in **RESPONSE 10-13** of Section D of the Response to Comments document.

To address these two issues, the relevant portion of Part IV.G.1.a through Part IV.G.1.c has been modified in the Final permits as follows:

"a. The permittee~~, in coordination with the STP and other hydraulically connected communities~~, as per D.3.a and G.10, shall submit an updated characterization study that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling and other means as appropriate to establish the existing baseline conditions, evaluate the efficacy of the CSO technology based controls, and determine the baseline conditions upon which the LTCP will be based. The permittee shall work in coordination with the combined sewer communities which are hydraulically connected to the STP, for appropriate Characterization, Monitoring and Modeling of the Sewer System.

b. The characterization shall:

- include a thorough review of the entire collection system that conveys flows to the treatment works, including areas of sewage overflows, including to basements, streets and other public and private areas, to adequately address the response of the CSS to various precipitation events;
- identify the number, location, frequency and characteristics of CSOs; and
- identify water quality impacts that result from CSOs.

Ambient in-stream monitoring may ~~shall~~ be performed in accordance with the guidance document entitled: "Receiving Waters Monitoring Work Plan Guidance for the CSO Program" available at www.state.nj.us/dep/dwq ~~*To Be Determined.*"~~

c. The permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information. A list of the studies ~~such as~~ …

Note that for CSO permits issued to municipalities, the modified version of Part IV.G.1.a is as follows:

> "a. The permittee, ~~in coordination with the STP and other hydraulically connected communities,~~ as per D.3.a and G.10, shall submit an updated characterization study that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling and other means as appropriate to establish the existing baseline conditions, evaluate the efficacy of the CSO technology based controls, and determine the baseline conditions upon which the LTCP will be based. The permittee shall work in coordination with the STP and other combined sewer communities which are hydraulically connected to the STP, for appropriate Characterization, Monitoring and Modeling of the Sewer System.

The Department disagrees that the need for ambient monitoring is dependent upon which approach is chosen. In both the Presumption and the Demonstration Approaches, appropriate baseline and subsequent ambient water quality monitoring must be conducted to determine receiving water quality with respect to WQS. Ambient monitoring is required again during and after the completion of the LTCP to determine the effectiveness of CSO controls and to verify compliance with WQS and the protection of designated uses.

This change affects Part IV.G.1.a, Part IV.G.1.b and Part IV.G.1.c of the Final permits.

9. COMMENT: Part IV.G.1.a includes the phrase "water quality impacts that result from CSOs." It is beyond the work specified herein to adequately identify "water quality impacts that result from CSOs" without the existing information on the receiving waters. There is limited information on the Elizabeth River and the Peripheral Ditch and the Great Ditch, all of which receive CSO discharges from the City of Elizabeth. This requires receiving water modeling which should be conducted by the Department. [12]

RESPONSE 9: The Department agrees with the commenter that it is necessary to understand existing information on the receiving waters in order to adequately assess the water quality impacts that result from CSOs. In that regard, the EPA National CSO Policy and the NJPDES regulations at N.J.A.C. 7:14A-11, Appendix C, Section II – EPA Objectives for Permittees, state, "Permittees with CSSs that have CSOs should immediately undertake a process to accurately characterize its sewer systems, to demonstrate implementation of the Nine Minimum Controls, and to develop a long-term CSO control plan." Also, N.J.A.C. 7:14A-11, Appendix C, Section II.C.1, provides, "In order to design a CSO control plan adequate to meet the requirements of the CWA, a permittee should have a thorough understanding of its sewer system, the response of the system to various precipitation events, the characteristics of the overflows, and the water quality impacts that result from CSOs." While the Department understands the need for modeling associated with the tasks involved in developing an LTCP, it is the permittees' responsibility to undertake these tasks.

No changes have been made to the Final permit(s) as a result of this comment.

10. COMMENT: Section G.1.a identifies a series of studies that need to be conducted/updated to characterize the collection system and CSO discharges. Ambient in-stream monitoring is included to evaluate the effect of the CSO discharges. None of these provisions have relevance to JMEUC, and only prior Elizabeth City studies are identified for assessment. Obviously, the degree of flow that can be processed by JMEUC will be a necessary factor in the LTCP alternatives evaluation. That does not justify the implication that JMEUC must conduct these studies, and this section should be specified as inapplicable to JMEUC. JMEUC responsibilities under this Minimum Control should be limited to modeling of the JMEUC collection system for the purposes of evaluating alternatives for maximizing wet weather flow to the STP and evaluating potential impacts to the separate portions of the collection system. **[**9]

11. COMMENT: PVSC requests that requirements to "evaluate the efficacy of the CSO technology based controls;" "identify the number, location, frequency and characteristics of CSOs;" "identify water quality impacts that result from CSOs;" and to conduct ambient in-stream monitoring in accordance with a to-be-determined guidance document be deleted from this Item. PVSC does not own or operate any CSO outfalls or CSO controls. Additionally, PVSC requests Section G.1.b. be deleted from its Individual NJPDES permit because PVSC does not own or operate any CSO outfalls or CSO controls. [42]

12. COMMENT: MCUA and JMEUC do not own or operate a CSS. Therefore, Section G should be deleted in its entirety from MCUA's and JMEUC's permits. [15]

13. COMMENT: The BCUA does not own nor operate any portion of a CSS or the CSO Outfalls. The system characterization as detailed in Section G is more for communities with CSO discharges and does not really pertain to BCUA since BCUA has no outfalls. This requirement should be eliminated from the BCUA Permit. [21]

RESPONSE 10-13: Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

The Department's regulations at N.J.A.C. 7:14A-22.1(b), the National CSO Policy, and the 1989 CSO Strategy all emphasize the necessity and responsibility of the STP to assume an integral role in system characterization and monitoring. The CSO Strategy states that, when different parts of a single CSS are owned and operated by more than one authority, "permits issued to such authorities should require joint preparation and implementation of the requirements of this strategy," including identification and monitoring of CSOs within the CSS, "and specifically define the responsibilities and duties of each owner and operator." 54 Fed. Reg. 37372. System characterization and monitoring cannot be done piecemeal where each permittee is only responsible for the portion of the system that the permittee owns, as the commenters imply. Without coordination and cooperation of all the hydraulically connected permittees, fragmentary efforts by each of the permittees cannot be expected to account for the cumulative cause and effect of CSO events throughout the CSS. 59 Fed. Reg. 18691-92.

The Department recognizes that not all permittees own/operate the entire CSS. In order to ensure that each of the CSO permittees completes an LTCP, all NJPDES CSO permittees in one

hydraulically connected system are required to submit a full LTCP which contains all of the information required under each of the nine elements of the LTCP. The LTCP may identify specific responsibilities for each municipality and STP. These requirements have been included in all of the NJPDES CSO permittee permits, whether the permittee currently owns and/or operates any CSO outfalls, or only owns and/or operates the STP that receives flows from a CSS. The Department has prepared the individual permits to require STPs, including those who do not own or operate CSO outfalls, to cooperate with CSO owners and operators and include the information provided by the permittees that do own and operate that portion of the CSS in its LTCP submission materials. The Department has addressed this by adding a new provision set forth in Part IV.G.10 for all NJPDES CSO permits to clarify the permittees' respective obligations.

"10. Permittee's LTCP Responsibilities

a. The permittee is responsible for submitting an LTCP that addresses all nine elements in Part IV.G.

Where multiple permittees own/operate different portions of a hydraulically connected CSS, the permittee is required to work cooperatively with all other permittees to ensure the LTCPs are consistent. The LTCP documents must be based on the same data, characterization, models, engineering and cost studies, and other information, where appropriate. Each permittee is required to prepare the necessary information for the portion of the hydraulically connected system that the permittee owns/operates and provide this information to the other permittees within the hydraulically connected system in a timely manner for LTCP submission."

This change affects Part IV.G.10 for the Final permits with the exception of NHSA (NJ0025321 and NJ0026085) and Trenton SA (NJ0020923) who own the STP and CSO outfalls.

14. COMMENT: In Section G.1.a., delete the phrase "including to basements, streets and other public and private areas." These are not discharges to waters of the United States and therefore are not the proper subject of a NJPDES Permit. [20] [29] [32] [35] [40] [42] [44]

RESPONSE 14: Part IV. G.1.a of the permit is a requirement for Characterization, Monitoring and Modeling of the system. In order to properly perform this task, it is necessary to have an estimate of how much flow is escaping the system to basements, streets and other public and private areas. While it is not necessary that these unauthorized discharges be modeled, their quantity and elimination must be taken into account in order to design an LTCP to meet the requirements of the CWA.

The Department does not agree that this phrase should be deleted. Section II.C.1.b of the National CSO Policy provides that, when characterizing the CSO, "The permittee should evaluate the nature and extent of its sewer system through evaluation of available sewer system records, field inspections and other activities necessary to understand the number, location and frequency of overflows…" The purpose of the characterization of the CSS is to determine the

amount of combined flow which needs to be controlled under the LTCP to meet the requirements of the federal CWA, and understanding the areas affected by SSOs in the CSS - including public and private property – is key to developing a proper characterization of a CSS. Further, SSOs are unpermitted discharges that need to be eliminated to protect the public health and the environment and are indicative of problems in the collection system due to either improper O&M, or inadequate conveyance capacity. These conditions must be taken into account as they could significantly affect the outcome of the characterization study and the final LTCP. It was not the Department's intent that individual SSOs be modeled; however, their quantity and elimination must be taken into account.

This issue is also discussed in **RESPONSE 70** and **RESPONSE 89-90** where both responses are in Section C of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

15. COMMENT: Regarding Part IV.G.1.a, existing in-stream water quality is not solely a condition of the discharges of the City of Elizabeth but is also significantly impacted by any SSO discharges, storm water discharges and overland flow into the receiving waters that occur upstream of the City of Elizabeth. [12]

16. COMMENT: Part IV.G.1.a makes reference to Part IV.D.3 which provides submittal requirements for LTCPs. However, Part IV.D.3.a does not require the performance of an updated characterization study. In addition, the requirement for identifying "water quality impacts that result from CSOs" is unreasonable. In-stream water quality is not solely a condition of discharges from CSOs, but is impacted by numerous issues including SSOs, storm water discharges and overland flow into receiving waters upstream of Newark**.** What if the impairment is caused by background conditions? [35]

RESPONSE 15-16: The Department recognizes that there are many factors that affect in-stream water quality which often includes dischargers upstream. The inclusion of the requirements in Part IV.G.1.a regarding "Characterization, Monitoring and Modeling of the Combined Sewer System" is critical to understanding the system and the resulting impacts. Please refer to **RESPONSE 70** of Section A of the Response to Comments document with respect to meeting water quality standards.

The Department disagrees that the requirement to identify "water quality impacts that result from CSOs" is unreasonable. In order to properly assess whether or not the discharge from the CSO precludes the attainment of water quality, it is necessary to know the water quality impacts existing in the water body that are from background sources of pollution such as SSOs, storm water discharges and overland flow.

As advised in EPA's "Guidance for Long Term Control Plans" (EPA 832-B-95-002, August 1995), "By characterizing both CSO and non-CSO sources of pollution within each watershed, the causes of water quality standards non-attainment can be addressed more effectively, and receiving water body goals can be established." A proper, well-designed Characterization Study should be able to identify most, if not all, of these sources of pollution in a water body.

Note that the purpose of the reference to Part IV.D.3.a is to develop and submit an LTCP that appropriately coordinates the integrated components of parts of the hydraulically connected system.

No changes have been made to the Final permit(s) as a result of this comment.

17. COMMENT: Regarding Section G.1.b.i, please delete "as per Section F.9..," Section F.9 refers to ongoing monitoring of rainfall events. These rainfall records referred to in Section G.1.b.i and the National CSO Policy are historical rainfall records. [20] [29] [32] [33] [34] [35] [40] [42] [44]

18. COMMENT: Regarding Section G.1.b.i, please add "The permittee shall review recent rainfall records and develop a new Average Rainfall Year." [6] [15]

RESPONSE 17-18: Part IV.G.1.b has been renumbered as Part IV.G.1.d in the Final permits. The Department agrees that the reference to Section F.9 should be removed and the permits modified to state that climatological records should be consulted to develop the rainfall record for purposes of Part IV.G.1.b.i. Accordingly, this provision is revised as follows:

> "i. Rainfall Records—The permittee shall examine the historical rainfall record ~~as per Section F.9~~ for the geographic area of its existing CSS using sound statistical procedures and best available data. The permittee shall evaluate flow variations due to precipitation events in the receiving water body to correlate between CSOs and receiving water conditions."

If, over the course of time, the permittee determines that the chosen average rainfall year is no longer indicative of climatological conditions, the permittee may propose an alternative average rainfall year and revise its LTCP accordingly.

This change affects Part IV.G.1.d.i of the Final permits.

19. COMMENT: In Part IV.G.1.b.i, "The permittee shall evaluate flow variations in the receiving water body to correlate between CSOs and receiving water conditions." It is not clear as to the intent of this requirement. Is the intent to evaluate the delay between high receiving water flows and CSO discharges, or to try and establish an empirical relationship between rainfall and receiving water flows? This requirement is only applicable to non-tidal areas since flows in tidal areas are a function of the tide and not rainfall. The requirement should be modified to read: "In non-tidal areas, and where existing stream flow data is available, the permittee shall evaluate flow variations in the receiving water body to correlate between CSOs and receiving water conditions."[19] [26]

20. COMMENT: Part IV.G.1.b.i states: "The permittee shall evaluate flow variations in the receiving water body to correlate between CSOs and receiving water conditions." This provision does not apply to NHSA facilities since they do not discharge to non-tidal areas and therefore, this provision should be deleted. [25]

21. COMMENT: Please provide additional information regarding the meaning of Part IV.G.1.b.i. The portion of the Elizabeth River downstream of Broad Street is tidal, as is Arthur Kill, Newark Bay, and portions of the Great Ditch. How will all these variables in flow be identified and their impact evaluated? Only nine of Elizabeth City's CSOs are not affected. [12]

RESPONSE 19-21: The Department does not agree that the requirement for the permittee in Part IV.G.1.d "… to evaluate flow variations in the receiving water body to correlate between CSOs and receiving water conditions" should be deleted. Rainfall will affect flows and characteristics in non-tidal waterbodies as well as tidal waterbodies, although somewhat differently. Since precipitation in the form of rainfall or snowmelt is the reason that CSOs are designed to discharge, understanding the affects the precipitation has on the frequency, duration and volume of the discharges, as well as the receiving waters, is necessary to understand what controls will be needed to meet the National CSO Policy and the requirements of this permit. The Department expects that many of these site-specific issues will be resolved during the work plan process. See also **RESPONSE 22** in Section D of the Response to Comments document for additional information regarding modeling of tidal waterbodies.

As noted in **RESPONSE 17-18** of Section D of the Response to Comments document, Part IV.G.1.b has been renumbered as Part IV.G.1.d.

No changes have been made to the Final permit(s) as a result of these comments.

22. COMMENT: Regarding Section G.1.b.i, the Passaic River is tidal, as is the Newark Bay. The Peripheral Ditch flow rate is controlled by a complex system of tide gates and a manually operated pumping station to control flow during rainfall events. How will these variables in flow be identified and their impact evaluated? [35]

RESPONSE 22: The Department understands that understanding the characterization, monitoring, and modeling of the Peripheral Ditch may be challenging due to the variable affecting the flow. Such information will need to be taken into account while conducting the characterization during the development of the LTCP. The process of documenting the effect of the tide in the Passaic River and the Peripheral Ditch, as well as other variables, is wholly dependent on the extent of the design of each permittee's characterization study.

No changes have been made to the Final permit(s) as a result of these comments.

23. COMMENT: Part IV.G 1.b.iii states that all "available information" must be used to assess the impact of CSOs on the receiving waters. The information used for the assessment should be validated information, such as laboratory results from certified laboratories. Please change the text to read "available validated information." [28] [31]

24. COMMENT: Delete "summary" in Part IV.G.1.b.iii. There is no mention of the preparation or content of a "monitoring data summary" [20] [29] [32] [33] [34] [35] [40] [42] [44]

25. COMMENT: In Part IV.G.1.b.iii remove the reference to information gathered from Section F.9. There is no need to dictate the sources of information, and the CMP will be prepared in parallel with the System Characterization Report. It is not known how much compliance monitoring data will be available, or how relevant it will be. The Department should leave it to the permittee to identify the sources of data that will be used to characterize the system. [33] [34]

26. COMMENT: How will the data collected from Section F.9. be used when the CSO Monitoring required in Section G.1.b.iii. will take place before a significant amount of new data will be collected? [20] [29] [32] [35] [40] [42] [44]

RESPONSE 23-26: The Department agrees that Part IV.G.1.d.iii (formerly Part IV.G.1.b.iii) should be clarified to state that new or existing ambient data shall be (or should have been) collected in accordance with a Department approved Quality Assurance/Quality Control (QA/QC) program. The use of this word "summary" was meant to convey that data from existing sources, as well as new data, should be "summarized", or compiled, in the Characterization Studies. The language in the National CSO Policy and N.J.A.C. 7:14A-11 (Appendix C) is slightly different and does not take into account that existing data may be used along with new data to satisfy this requirement. The language in the Final permits has been revised to more accurately reflect this intent by deleting the word "summary." The Department also agrees with the commenters and has removed the reference to Part IV.F.9.

Therefore, the Department has modified Part IV.G.1.d.iii in the Final permit as follows:

> "iii. CSO Monitoring - Using all available information, ~~including the information gathered from Section F.9.~~, the permittee shall develop and/or update a previously existing, comprehensive, representative monitoring program that measures the frequency, duration, flow rate, volume and pollutant concentration of CSO discharges and assesses the impact of the CSOs on the receiving waters. The monitoring data ~~summary~~ may utilize existing data from previous studies, and must include necessary CSO effluent and ambient in-stream monitoring for pathogens (including current and recreational standards for bacteriological indicators (e.g., fecal coliform, Enterococcus and E. Coli)). Only ambient monitoring data collected in accordance with a Department-approved Quality Assurance/Quality Control program shall be used. A representative sample of overflow points can be selected that is sufficient to allow characterization of CSO discharges, their water quality impacts and to facilitate evaluation of control plan alternatives."

This change affects Part IV.G.1.d.iii of the Final permits.

27. COMMENT: Regarding Part IV.G.1.b.iii and bacteriological indicators, while the Department has indicated at public meetings that the existing monitoring can be used, the previous monitoring conducted did not include E. coli and had limited fecal and enterococci data collection due to issues with getting samples analyzed by labs during non-working hours. Accordingly, it does appear that additional monitoring data will need to be collected to satisfy this requirement. [19] [25] [26]

RESPONSE 27: The Department stated publicly that existing information may be used to satisfy various permit requirements, or portions thereof. Additional data is likely to be needed in many instances in order to accurately characterize the system, but if permittees obtain existing data, they may be able to use it to supplement the informational requirements in the permit in order to save money, time and other resources. The statement was not intended to mean that all of the information submittals could be satisfied solely with existing data. Additional data may need to be gathered to satisfy the permit requirement.

No changes have been made to the Final permit(s) as a result of this comment.

28. COMMENT: Regarding Part IV.G.1.b.v, the Department should confirm that this is the effective definition of sensitive areas. Waterbodies with secondary contact classification shall not be considered bathing beaches even if accessible. Also the portion of the Elizabeth River upstream of Broad Street is classified as FW2-NT which would be primary contact; however, it is part of the channelized portion of the River with concrete bottom and vertical concrete walls, and as such is inaccessible. Will this be considered a sensitive area? [12]

29. COMMENT: Paragraph G 1.b.v introduces "bathing beaches" as a sensitive area. Is there a regulatory definition of a bathing beach and are areas designated as bathing beaches? The term "bathing beach" is redundant with "primary contact" which is a regulatory based designated use that can be identified and delineated. Unless there is a regulatory basis for the use of "bathing beach", please delete the term from the other valid sensitive area designations. [28] [31]

RESPONSE 28-29: The term "bathing beach" was added to the list of types of sensitive areas for the NJPDES CSO permits to ensure that primary contact recreation areas used as bathing beaches are given the highest priority toward controlling CSOs.

To clarify this intent, the Department has determined that it is appropriate to revise Part IV.G.1.d.v as follows:

> "v. The permittee shall identify sensitive areas where CSOs occur. These areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters used for ~~with~~ primary contact recreation (including but not limited to bathing beaches), ~~bathing beaches,~~ public drinking water intakes or their designated protection areas, and shellfish beds."

Bathing beach shall mean a waterfront property where public access is provided, and where public bathing occurs routinely for recreational purposes. The term "bathing beaches" is found in EPA's Combined Sewer Overflows "Guidance for Long-Term Control Plan" (EPA 832-B-95-002) dated September 1995. In Section 3.3.3.6 *Consideration of Sensitive Areas* of this guidance document, the EPA states that "Examples of sensitive areas presented in the National CSO Policy include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters supporting primary contact recreation (e.g., bathing beaches), public drinking water intakes or their designated protection areas, and shellfish beds."

This section is not intended to establish definitions; rather this section lists types of "sensitive areas" and includes, within the list of "sensitive areas", a narrower interpretation of the broader "area with primary contact recreation." Please note that this list is not exclusive.

There is a distinction between those waters that are designated as primary contact recreation versus those waters where primary contact recreation is an existing use, regardless of their current designation under the SWQS. Additionally, the Department does not agree that the term "bathing beach" is redundant. "Waters with primary contact recreation" are not the same as waters with a designated use of "primary contact." For example, waterbodies with a secondary contact designated use pursuant to N.J.A.C. 7:9B may also have areas that have an existing use as a "bathing beach." As noted above, that bathing beach would be considered a sensitive area under this section of the permit as one of the highest priorities for control of CSOs is to protect the public where there is actual direct/primary contact with the receiving waters. Further, while not diminishing the importance of controlling CSOs to receiving waters with primary contact classification, areas where there is actual direct contact as an existing use should be given a higher priority for CSO than waters where there is a classification, but no actual primary contact use.

Additionally, as most of the waters in New Jersey are classified as primary contact (with the exception of the SE-2 and SE-3 waters of the NY/NJ Harbor) it would be meaningless to say that all CSOs to waters classified as primary contact should get the highest priority, as that would negate the importance of sensitive areas. The purpose of identifying bathing beaches within waters with primary contact recreation is to ensure that areas of the receiving waters which are used by the public receive the highest priority in controlling CSOs.

This change affects Part IV.G.1.d.v of the Final permits.

30. COMMENT: Section G.1.b.v should be moved to G.3, Consideration of Sensitive Areas. [20] [32] [35] [40] [42] [44]

31. COMMENT: Section G.1.b.v, which is related to the identification of sensitive areas, should be removed, as it is duplicative with Section G.3: Consideration of Sensitive Areas. [33] [34]

RESPONSE 30-31: The Department disagrees that these two sections are duplicative, or that they should be consolidated. Specifically, Section G.1.d.v. requires the permittee to identify sensitive areas where CSOs occur. Section G.3 requires those areas already identified under Section G.1 to be given the highest priority in the LTCP to controlling the overflows.

No changes have been made to the Final permit(s) as a result of these comments.

Part IV, Combined Sewer Management, Section G, LTCP #2, Public Participation Process

32. COMMENT: Regarding Part IV.G.2.a, what is meant by "actively involve"? Does a public notice satisfy this requirement? How should the input of the public be incorporated in the LTCP

if the input from the various affected public sectors greatly differ, and to follow that input may not produce an LTCP meeting the requirements of Section 4? [35]

RESPONSE 32: The Department agrees that additional guidance would be beneficial to better describe the Department's intent regarding this condition given inclusion of the term "actively involve." In addition, a reference to the new provision set forth in Part IV.G.10 is appropriate to clarify the permittees' respective obligations as part of the LTCP. A generalized excerpt of Part IV.G.2.a is with revisions shown is as follows:

"a. The permittee shall submit the Public Participation Plan to include appropriate input and participation with other hydraulically connected communities, in accordance with D.3.a and G.10. The permittees may use information from the previous submittals…

b. Implementation shall actively involve the affected public throughout each of the 3 Steps of the LTCP process. The affected public includes rate payers (including rate payers in the separate sewer sections), industrial users of the sewer system, persons who reside downstream from the CSOs, persons who use and enjoy the downstream waters, and any other interested persons. A Public Participation Plan shall include the following elements:

i. Conduct outreach to inform the affected/interested public (during the development of the permittee's LTCP) through various methods which may include: public meetings, direct mailers, billing inserts, newsletters, press releases to the media, postings of information on the permittee's website, hot line, development of advisory committees, etc.; and to

ii. Invite members of the affected/interested public to join a Supplemental CSO Team to work with the permittee's assigned staff, consultants and/or contractors as required in Part IV, Section G.2.c. of the permit."

Permittees should note that a public notice, by itself, does not satisfy this requirement. Rather, the permittee must show the effort to "actively involve" the public in order to be in compliance with the National CSO Policy, N.J.A.C. 7:14A-11 (Appendix C), and the requirements of this permit. Note that the permittee is required to solicit input from the public in the decision making process to select the long-term CSO controls and not necessarily to implement the recommendations of the public.

This change affects Part IV.G.2.a and Part IV.G.2.b of the Final permits.

33. COMMENT: The schedule for producing an LTCP does not leave enough time for a thorough discussion and true active involvement with the public for the nine LTCPs required by the PVSC and its municipalities. The LTCP may require the largest expenditure of funds ever undertaken by a municipality for a single project. This is a key reason for extending the schedule for the production of an LTCP, and respects the constraints of municipal and taxpayer financial resources. [20] [29] [32] [35] [40] [42] [44]

34. COMMENT: Regarding Part IV.G.2, the schedule for producing an LTCP does not leave enough time to implement the requirements for public participation. The LTCP will require a significant expenditure of funds by NBMUA, and therefore warrants considerable public participation. This is a key reason for extending the schedule for the development of an LTCP. [33] [34]

RESPONSE 33-34: The Department has extended various submittal deadlines including the submission of the LTCP to 59 months for those permittees who agreed to submit a single, coordinated LTCP. This is expected to afford adequate time for multiple communities to undertake appropriate public engagement as described in **RESPONSE 32** above. Refer to **RESPONSE 170-174** of Section B of the Response to Comments document for additional information on the extension of the LTCP submission.

No changes have been made to the Final permit(s) as a result of these comments. However, revisions of the date have been reflected in the Final permit(s) as indicated in the CSO Submittal Summary.

35. COMMENT: The references to D.3.a and PVSC should be removed from Part IV.G.2.a of the NBMUA permit (NJ0108898) as they do not directly relate to the *Public Participation Process*. [33]

36. COMMENT: The reference to D.3.a should be removed from Part IV.G.2.a as this section does not directly relate to the *Public Participation Process*. [34]

RESPONSE 35-36: The Department does not agree that the reference to Section D.3.a should be removed. The purpose of the reference to Part IV.D.3.a is to develop and submit an LTCP that appropriately coordinates the integrated components of parts of the hydraulically connected system. See the new provision set forth in Part IV.G.10 for all NJPDES CSO permits as outlined in **RESPONSE 10-13** of Section D of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of these comments.

37. COMMENT: Part IV.G.2.a makes reference to Section D.3.a which refers to encouraging a single LTCP. How does that Section relate to "recertify/update the Public Participation Process?" What is meant by "recertify?" [20] [32] [35] [40] [42] [44]

38. COMMENT: There are some differences in the language for the public participation work plans in the Elizabeth City (NJ0108782), MCUA (NJ0020141), JMEUC (NJ0024741) and Perth Amboy (NJ0156132) permits compared to the Camden area CSO NJPDES permits. Please clarify. [13]

RESPONSE 37-38: The commenter is correct that the language in Part IV.G.2.a for the earliest Draft permits issued to the Camden area CSO permittees in April 2013 ("The permittee shall recertify/update the Public Participation Plan previously submitted on…"), is slightly different than the language in this section for those Draft permits issued after this date ("The permittee shall submit a Public Participation Plan in accordance with D.3.a."). The Department

subsequently revised this language in later Draft permits to emphasize the requirement for the permittees to work cooperatively and encourage them to develop and submit a single LTCP, as described in Part IV, Section D.3.a. Please note, however, that this revised language is simply a clarification and does not significantly affect the content of the permit condition. Please refer to **RESPONSE 54** in Section B of the Response to Comments document for additional information regarding certification.

As described in RESPONSE 32 in Section A of the Response to Comments document, all Final permits reflect this updated language in Part IV.G.2.a.

39. COMMENT: Information from Hackensack regarding the public participation plan should be included in Part IV.G.2.a. [21]

RESPONSE 39: Part IV.G.2.a contains a list of previous submittals regarding the Public Participation Report. As stated in Part IV.G.2.a of the BCUA permit, "A complete list of studies performed by all CSO permittees in BCUA's hydraulically connected system is summarized in Appendix C at the end of this permit." Information pertaining to the City of Hackensack can be found in the above referenced location within the Draft NJPDES CSO permit NJ0020028 for BCUA Little Ferry STP. Nonetheless, the Department agrees that this information should be incorporated into Part IV.D.2.a for this permit.

This change affects Part IV.D.2.a of the Final permit for the City of Hackensack (NJ0108766). No Final permit(s) have been changed as a result of this comment.

40. COMMENT: Regarding Part IV.G.2.a, delete the phrase "using their current sewer system infrastructure," since it has nothing to do with submitting a Public Participation Plan. [33]

RESPONSE 40: The Department does not agree that the phrase "using their current sewer system infrastructure," should be deleted from Part IV.G.2.a of the North Bergen MUA (NJ0108898) permit. North Bergen MUA's current sewer system infrastructure has changed from when the North Bergen MUA submitted its Public Participation Plan to the Department in April 2007. In 2007, the sewage flows from the western and central sections of North Bergen Township were directed to the North Bergen MUA's Central STP, which was subsequently closed in October 2010. All sewage flows that were going to the Central STP were then directed into the PVSC collection system. Since this portion of North Bergen Township is now part of the PVSC's hydraulically connected sewer system, the evaluation presented for public review has changed and referenced above and is no longer appropriate.

No changes have been made to the Final permit(s) as a result of this comment.

41. COMMENT: The intent of Part IV.G.2.b and the public participation process should be clarified by the Department since it is very ambiguous. Is it expected that the permittee is to allow the general public, with little knowledge of operations, to provide input to the O&M procedures and methods employed by the permittee? If so, this requirement is inappropriate and unreasonable. [19] [21] [26]

42. COMMENT: What are the duties of a "supplemental CSO Team"? We suggest the more commonly used terms "Citizens Advisory Group" or "Citizens Advisory Committee" be substituted for "supplemental CSO Team." [6] [15] [20] [32] [35] [40] [42] [44]

43. COMMENT: The Draft permit states that the supplemental CSO Team is "to work with the permittee's assigned staff from Section F.1." Staff listed in the O&M Manual will include operators, maintenance staff and supervisors; it will not include the professionals that will be developing the LTCP. PVSC requests that the Department clarify the intent of this requirement. [42]

44. COMMENT: Regarding the duties of a "supplemental CSO Team, does the term "Work with the permittee's assigned staff from Section F.I (O&M staff)" mean to actually work side by side in the sewers as a volunteer sewer cleaning squad? [15]

45. COMMENT: Section F.1 refers to the O&M of the NMC. Newark uses contractors to perform many of these CSO related O&M functions. Other functions are performed by Department of Water and Sewer Utilities laborers and equipment operators. Does the Department envision the contractors' employees and/or these City Employees to participate and be members of this "team/group/committee"? [35]

46. COMMENT: Delete Part IV.G.2.b. The role of a "supplemental CSO Team" is completely undefined, and the manner in which NBMUA fulfills its public participation process should be left to NBMUA. [33] [34]

47. COMMENT: Part IV.G.2.b should be deleted as there is no requirement by law to form a "supplemental CSO Team." [25]

RESPONSE 41-47: While the Department disagrees that Part IV. G.2.c (formerly Part IV.G.2.b) should be deleted, the Department does agree that additional guidance would be beneficial to better describe the Department's expectations regarding the Supplemental CSO Team. Part IV.G.2.c is revised as follows:

"c~~b~~.The permittee shall invite members of the affected/interested public to establish a Supplemental ~~supplemental~~ CSO Team to work with the permittee's assigned staff from Section F.1 and to work as an informal work group as a liason between the general public and the decision makers for the permittee. The goals of the Supplemental CSO Team could consist of the following elements:

i. Meet periodically to assist in the sharing of information, and to provide input to the planning process;

ii. Review the proposed nature and extent of data and information to be collected during LTCP development;

iii. Provide input for consideration in the evaluation of CSO control alternatives; and

iv. Provide input for consideration in the selection of those CSO controls that will cost effectively meet the Clean Water Act requirements."

Note that the Department is not mandating specific duties be performed by the "Supplemental CSO Team," but rather expects the "Supplemental CSO Team" to work as a liaison between the general public and the decision makers for the permittee. The "Supplemental CSO Team" could be comprised of interested members of the public to work with members of the permittee's staff that are knowledgeable with respect to the permittee's CSS and the permittee's CSO O&M Program and LTCP development. It is not the Department's intention for the permittee's engineering consultants and/or contractors to be members of the "Supplemental CSO Team" but they can serve to assist the team.

The Department maintains that the "Supplemental CSO Team" will be beneficial in soliciting input from the public throughout the planning process, and will enable the permittee to better develop an outreach program through public meetings and public hearings that reaches a broad base of citizens. Through this process the Department believes that the permittee will gain a public perspective on local water quality issues and sewer system problems, the amount of public concern about CSOs in particular, and the public's willingness to participate in efforts to eliminate CSOs. As per Section II.C.2 of the National CSO Policy, the affected public includes rate payers, industrial users of the sewer system, persons who reside downstream from the CSOs, persons who use and enjoy these downstream waters, and any other interested person.

The Department does not expect the public (as part of the "supplemental CSO Team") to provide "engineering" type input to the permittee's O&M procedures and methods for the collection system (including pump stations, gravity pipes, force mains, tide gates, regulators, S/F facilities, etc.,), or to work side by side in the sewers as a volunteer sewer cleaning squad. The Department would expect the public to be provided with information to help them better understand the issues, costs, and operation of the treatment works. In addition, it is expected that the public will share its local concerns and goals of the community as it relates to the permittees' CSS and CSOs.

Regarding the suggestion that more commonly used terms such as "Citizens Advisory Group" or "Citizens Advisory Committee" be substituted for "Supplemental CSO Team", the Department maintains that these groups generally focus on a much broader range of issues so the language in the permit has not been changed.

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

Part IV, Combined Sewer Management, Section G, LTCP #3, Consideration of Sensitive Areas

48. COMMENT: Delete "bathing beach" from Part IV.G.3.a. The term "bathing beach" does not appear in the National CSO Policy or NJ CSO regulations. What is the definition of bathing beach? Where is it defined in EPA or Department regulations? How is it different than waters with primary contact? Why was it added to this section? [20] [29] [32] [35] [40] [42] [44]

49. COMMENT: Section D.3.a refers to encouraging a single LTCP. How does that Section relate to Sensitive Areas? How does that Section relate to Evaluation of Alternatives? [20] [29] [32] [35] [40] [42] [44]

50. COMMENT: Remove the reference to D.3.a, since the Department's encouragement to develop a system-wide LTCP has nothing to do with the consideration of sensitive areas. [33] [34]

RESPONSE 48-50: Part IV.G.3.a concerns the consideration of sensitive areas in the LTCP. Part IV.G.4 concerns the Evaluation of Alternatives in the LTCP. The Department maintains that both these sections are appropriate for all NJPDES CSO permittees as described in **RESPONSE 10-13** of Section D of the Response to Comments document.

Regarding the consideration of sensitive areas, as stated in **RESPONSE 28-29** of Section D of this Response to Comments document, the Department does not agree that the term "bathing beach" should be deleted, but has modified the term in Part IV.G.3.a. The term 'bathing beach' was added to the list of types of sensitive areas for the NJPDES CSO permits to ensure that primary contact recreation areas used as bathing beaches are given the highest priority toward controlling CSOs. Accordingly, Part IV.G.3.a is revised as follows:

> "a. The permittee's LTCP shall give the highest priority to controlling overflows to sensitive areas, in accordance with D.3.a and G.10. Sensitive areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters used for ~~with~~ primary contact recreation (including but not limited to bathing beaches), ~~bathing beaches,~~ public drinking water intakes or their designated protection areas, and shellfish beds."

In addition, the Department does not agree that the reference to Section D.3.a should be removed. Section D.3.a refers to language concerning the permit condition for permittees to work cooperatively and encouraging them to develop and submit a single LTCP, including the *Consideration of Sensitive Areas* information and is relevant to all of the permittees in the hydraulically connected sewer system. In fact, a reference to the new provision set forth in Part IV.G.10 has been included to clarify the permittees' respective obligations as part of the LTCP.

This change affects Part IV.G.3.a of the Final permits.

51. COMMENT: Only Sensitive Areas as currently designated should be addressed under this permit and the permittee should not be required to modify its CSS, CSO Points or Selected Alternative to satisfy any future expansions of Sensitive Area designation. [35]

RESPONSE 51: The Department maintains that, should there be any future expansion of the sensitive area designation, the permittee may need to expand or retrofit its CSO control program in order to comply with the National CSO Policy and the permit.

No changes have been made to the Final permit(s) as a result of this comment.

52. COMMENT: Replace "Sensitive areas include…" with "Sensitive areas, as determined by the NPDES authority in coordination with State and federal agencies, as appropriate, include ..." [11] [24]

RESPONSE 52: The Department agrees that the determination of sensitive areas shall be done in coordination with the NPDES authority and other state and federal agencies as appropriate. The Department will evaluate the Consideration of Sensitive Areas report, submitted in accordance with Part IV.D.3.b.iv, and will work with the permittee to revise if necessary. The Department believes that this approach satisfies the intent of the comment.

No changes have been made to the Final permit(s) as a result of this comment.

53. COMMENT: Section G.3 addresses protection of "sensitive areas" from CSO discharge impacts. JMEUC does not disagree that such areas, should they exist, be protected. However, the impacts all relate to CSOs, not the STP discharge. Therefore the provision only applies to Elizabeth City. [9]

54. COMMENT: BCUA does not own nor operate any portion of a CSS or the CSO Outfalls. The *Consideration of Sensitive Areas* is for communities with CSO discharges and does not really pertain to BCUA since BCUA has no outfalls. This requirement should be eliminated from the BCUA permit. [21]

55. COMMENT: The permittee does not own or operate a CSS. Therefore, delete this section in its entirety. [15]

56. COMMENT: PVSC requests this section be deleted from its Individual NJPDES permit in its entirety. PVSC does not own or operate any CSO outfalls. [42]

RESPONSE 53-56: The Department disagrees with the comments that Part IV.G.3 should be deleted from any of the NJPDES CSO permits. While the Department agrees that some STP permittees (e.g., JMEUC, BCUA, MCUA and PVSC) may not currently own/operate any CSO outfalls, all of the LTCP requirements have been included in all of the CSO permittee permits, whether the permittee currently owns/operates any CSO outfalls, or if they only own/operate the STP that receives flows from a CSS. The fact that a permittee owns and operates an STP that receives combined wastewater flow from a combined sewer collection system means that the STP is part of a CSS POTW. See the new provision set forth in Part IV.G.10 for all NJPDES CSO permits. Please refer to **RESPONSE 26–42** in Section A of the Response to Comments document for further information regarding responsibilities related to owning and/or operating POTW infrastructure.

In addition, an LTCP is a coordinated effort between the STP and the CSO communities. Regardless of whether or not an STP owns a CSO, the amount of wet weather flow an STP is willing or capable of receiving will directly impact the amount of flow discharged from a CSO. STPs must be involved with the consideration of sensitive areas because expansion of the STP may be the appropriate CSO control alternative to reduce or eliminate discharges to such areas.

No changes have been made to the Final permit(s) as a result of these comments.

57. COMMENT: Section G.3.a addresses protection of "sensitive areas" from CSO discharge impacts. NHSA does not disagree that such areas, should they exist, be protected. Such classification is contrary to EPA's guidance on evaluating water quality impacts from CSOs and the *Iowa League of Cities* decision by the 8th Circuit. The conditions surrounding the location of the discharge must be considered to determine if a "significant" public health threat is presented by an existing CSO. [25]

RESPONSE 57: The Department does not agree that Section G.3.a is contrary to EPA's guidance. The permit language is consistent with the language set forth in the National CSO Policy and N.J.A.C. 7:14A-11 (Appendix C, Section II.C.3) and is therefore consistent with federal and State requirements. The National CSO Policy and N.J.A.C. 7:14A-11 (Appendix C, Section II, C.3.) states that the "EPA expects a permittee's long-term CSO control plan to give the highest priority to controlling overflows to sensitive areas." Also, the Department does not agree that the "Sensitive Areas" classification is contrary to the 8th Circuit's decision in *Iowa League of Cities v. EPA*, 711 F.3d 844 (8th Cir. 2013). That case does not address consideration of sensitive areas within the context of an LTCP and EPA has indicated that this decision is not applicable outside the 8th Circuit.

The commenter urges that "the conditions surrounding the location of the discharge must be considered to determine if a 'significant' public health threat is presented by an existing CSO." However, there is no such language in the National CSO Policy or N.J.A.C. 7:14A-11 (Appendix C). The National CSO Policy and N.J.A.C. 7:14A-11 (Appendix C) set forth specific requirements for consideration of the control of CSOs in sensitive areas within the required LTCP.

No changes have been made to the Final permit(s) as a result of this comment.

58. COMMENT: In Paragraph b.i, add the phrase "to sensitive areas" after "…increased CSO overflows." [20] [29] [32] [35] [40] [42] [44]

RESPONSE 58: The Department believes that adding the phrase "to sensitive areas" after "…increased CSO overflows" in Part IV.G.3.b.i., is both redundant and unnecessary. The language provided under Part IV.G.3. Consideration of Sensitive Areas pertains to "sensitive areas"; therefore, repeating this phrase under Part IV.G.3.b.i., adds no additional information or clarity to this permit requirement.

"b. The LTCP shall comply with the following requirements:

i. Prohibit new or significantly increased CSOs ~~overflows~~.

ii. Eliminate or relocate CSOs ~~overflows~~ that discharge to sensitive areas wherever physically possible and economically achievable, except where elimination or relocation would provide less environmental protection than additional treatment.

iii. Where elimination or relocation is not physically possible and economically achievable, or would provide less environmental protection than additional treatment, the permittee shall provide the level of treatment for remaining CSOs ~~overflows~~ deemed necessary to meet WQS for full protection of existing and designated uses."

This change affects Part IV.G.3.b of the Final permits.

59. COMMENT: What is the definition of "economically achievable" in Part IV.G.3.b.ii and G.3.b.iii? Is the consideration of CSO outfalls in sensitive areas to be considered as part of the overall LTCP when determining affordability? [35]

RESPONSE 59: The permittee is required under the National CSO Policy, N.J.A.C. 7:14A-11 (Appendix C, Section II, C.4), and this permit to consider a reasonable range of CSO control alternatives in the preparation of its LTCP that will meet the CWA requirements, in part by placing the highest priority on CSO control alternatives for those discharges into sensitive areas. If the permittee demonstrates that the costs associated with eliminating or relocating CSO outfalls that discharge into sensitive areas are excessive or unaffordable, the permittee shall submit such information for review to the Department as part of the LTCP. The analysis of CSO control alternatives performed by the permittee, including CSO control alternatives for those discharges into sensitive areas, should be sufficient to make a reasonable assessment of cost and performance. The costs of implementing CSO controls to eliminate, relocate, or provide treatment to discharges into sensitive areas are to be considered as part of the overall LTCP when determining affordability.

No changes have been made to the Final permit(s) as a result of this comment.

Part IV, Combined Sewer Management, Section G, LTCP #4, Evaluation of Alternatives

60. COMMENT: EPA acknowledges that permittees have already analyzed and evaluated a number of CSO alternatives during earlier permit terms. We would like to reiterate the importance of ensuring that the LTCP includes a synthesis of existing information in addition to any new requirements supplemented by new analysis, such that a thorough evaluation of a sufficient range of control alternatives is conducted in accordance with EPA's National CSO Policy. We note that the National CSO Policy contains specific language for evaluating a reasonable range of CSO control alternatives and states the following:

"EPA expects the long-term CSO control plan to consider a reasonable range of alternatives. The plan should, for example, evaluate controls that would be necessary to achieve zero overflow events per year, an average of one to three, four to seven, and eight to twelve overflow events per year. Alternatively, the long-term plan could evaluate controls that achieve 100% capture, 90% capture, 85% capture, 80% capture, and 75% capture for treatment. The LTCP should also consider expansion of POTW secondary and primary capacity in the CSO abatement alternative analysis. The analysis of alternatives should be

sufficient to make a reasonable assessment of cost and performance." (59 FR 18692) [5] [11] [18] [24]

RESPONSE 60: The Department agrees with EPA's comment regarding the importance of ensuring that the LTCP includes a synthesis of existing information supplemented by new analysis, such that a thorough evaluation of a sufficient range of control alternatives is conducted in accordance with the National CSO Policy. The permittee may also use any previous studies as conducted under the MGP (as outlined in the Draft permits) to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information. The Department maintains that the Final individual NJPDES CSO permits have incorporated the appropriate requirements of the National CSO Policy.

No changes have been made to the Final permit(s) as a result of this comment.

61. COMMENT: Section G.4, *Evaluation of Alternatives*, refers to issues related to combined sewer collection systems and CSO outfalls, and thus are not applicable to the BCUA. This segment of the permit should be eliminated or noted as not applicable to BCUA. [21]

62. COMMENT: PVSC requests this section be deleted from its Individual NJPDES permit with the exception of e.iii & vii. PVSC does not own or operate any CSO outfalls, therefore the remainder of this section is not applicable to PVSC. [42]

63. COMMENT: Regarding Part IV.G.4.e.iii, PVSC requests that "based upon this information, the permittee shall determine (modeling may be used) the amount of CSO discharge reduction that would be achieved by utilizing this additional treatment capacity while maintaining compliance with all permit limits." be deleted from its Individual NJPDES Permit. PVSC does not own or operate any CSO outfalls. PVSC will coordinate with the municipalities and provide them with the capacity evaluation at the STP. [42]

64. COMMENT: The permittee does not own or operate a CSS. Therefore, delete Part IV.G.4.a, b, c, d, f, g, in their entirety. The permittee does not own or operate a CSS or sanitary sewer collection system. Therefore, delete Part IV.G.4.e. i., ii. iv., v., vi., in their entirety. [15]

65. COMMENT: Section G.4.b. should limit JMEUC evaluations to evaluating alternatives for maximizing wet weather flow to the STP and evaluating potential impacts to the separate portions of the collection system. Paragraphs c and d should be deleted. Subparagraphs i, ii, v and vi under paragraph e should also be deleted. [9]

66. COMMENT: Section G.4.e.vii – Delete this section in its entirety, since NBMUA does not own or operate an STP for the Central Area CSS, which is the subject of this permit. [33]

67. COMMENT: Regarding Part IV.G.4.f and Part IV.G.4.g, since JMEUC does not own/operate CSO outfalls, Elizabeth City will determine what actions need to be taken.. [9]

68. COMMENT: The permittee does not own or operate a CSS. Therefore, delete the sentence "Based on this information...permit limits" in Part IV.G.4.e.iii. [15]

69. COMMENT: This permittee does not own or operate an STP. Therefore delete the sentence in Part IV.G.4.e.iii.. [15] [20] [29] [32] [40] [42] [44]

70. COMMENT: The permittee does not own/operate an STP. Therefore, delete Section G.4.e.vii in its entirety. [15] [20] [28] [31] [40] [42] [44]

71. COMMENT: The Town of Guttenberg does not own/operate an STP. Therefore, delete Part IV.G.4 in its entirety. [29]

72. COMMENT: Part IV.G.4.e.iii, iv, and vii are not applicable to the City of Elizabeth and should be removed from the permit. [12]

73. COMMENT: Paragraph G.4.e.vi refers to an STP. The Town of Kearny does not own or operate an STP. Therefore delete this section in its entirety. [32]

74. COMMENT: Paragraph G.4.e.iii requires "an evaluation of the capacity of the unit processes must be conducted at the STP." Fort Lee does not have the authority to conduct this evaluation at the STP. This can only be performed by the STP as a willing participant in a coordinated LTCP. This requirement should be deleted from the permit. [28] [31]

RESPONSE 61-74: The Department maintains that it is appropriate to include all of the LTCP requirements in all of the Final CSO NJPDES permits. The permittee will be required to implement the LTCP as approved. The Department has clarified the concerns raised by the commenters by adding a new provision at Part IV.G.10 as described in **RESPONSE 6-10** and **RESPONSE 75-77** where both responses are in Section D of the Response to Comments document. In addition, please refer to **RESPONSE 26-42** in Section A of the Response to Comments document for additional information.

No changes have been made to the Final permit(s) as a result of these comments.

75. COMMENT: In Part IV.G.4.a, delete the phrase "attainment of water quality standards" and substitute the phrase "water quality-based requirements of the CWA" on the second line of the section. The National CSO policy and state regulations use that phrase as the policy recognizes that CSO controls alone may not meet WQS. How does Part IV.G.4.a relate to Part IV.D.3.regarding submission of a single LTCP? [20] [29] [32] [35] [42] [44]

76. COMMENT: Part IV.G.4.a requires CSO controls to "provide for attainment of water quality standards." CSO controls alone cannot be expected to achieve this goal. Substitute "water quality-based requirements of the CWA" in this section which is consistent with the National CSO policy and state regulations which recognizes that CSO control alone may not meet WQS because of natural background or pollution sources other than CSOs.

Part IV.G.4.a should limit the range of alternatives considered in the LTCP to be feasible alternatives. Permittees should not be asked to consider or invest in alternatives that have not

been demonstrated to be effective. The alternatives considered should be able to demonstrate successful application for CSO control or require some degree of pilot testing before being deemed feasible. Please change "evaluate a range of alternatives" to "evaluate a range of feasible alternatives." [28] [31]

77. COMMENT: In Paragraph a, add "reasonable" between "evaluate a" and "range of CSO alternatives." This word appears in the National CSO policy and Department regulations. Why was this word eliminated in this Section? [20] [32] [33] [34] [35] [40] [42] [44]

RESPONSE 75-77: The Department acknowledges that CSO controls may not be sufficient to achieve compliance with WQS. As a result, the Department agrees that clarification of Part IV.G.4.a is needed to better conform to the National CSO Policy. In addition, a reference to the new provision set forth in Part IV.G.10 is appropriate to clarify the permittees' respective obligations as part of the LTCP development. The modified version of Part IV.G.4.a is as follows:

> "a. The permittee shall evaluate a reasonable range of CSO control alternatives, in accordance with D.3.a and G.10, that will meet the water quality-based requirements of the CWA ~~provide for attainment of water quality standards~~ using either the Presumption Approach or the Demonstration Approach (as described in Sections G.4.f. and G.4.g)."

This section of the permit requires the permittees to evaluate multiple CSO control alternatives, including the ones listed in the permit to determine which alternatives, either alone or in combination, will comprise the CSO control program to be submitted for Departmental approval. These control alternatives have been utilized across the country as part of other permittees' CSO control programs. The Department recognizes that not every alternative will be feasible for every CSO or permittee, thus the subject heading *Evaluation of Alternatives*. At a minimum, permittees must fully evaluate the alternatives listed in the permit. Accordingly, if a permittee determines that any of the alternatives listed in the permit are not feasible, those alternatives do not have to be implemented, but that analysis shall be submitted with the Evaluation of Alternatives Report in accordance with Part IV.D.3 of the permit. This ensures that the full array of options and alternatives has been evaluated and considered.

This change affects Part IV.G.4.a of the Final permits.

78. COMMENT: Regarding Part IV.G.4.b, delete "ensure that CSO discharges do not cause ….from CSO discharges." This language does not appear in the section *Evaluation of Alternatives* in the National CSO Policy and NJ Regulations. The entire phrase is redundant, duplicative of other sections, and not accurate. The policy recognizes that WQS cannot always be met. The National CSO Policy in Section II.C.4.b.ii. states: "Where WQS and designated uses are not met in part because of natural background or pollution sources other than CSOs, a total maximum daily load …"

How can the permittee "ensure" that CSO controls will meet CWA requirements and do not cause exceedances of any water quality criteria when other sources of pollution impact water quality within the receiving waters? [20] [29] [32] [35] [40] [42] [44]

79. COMMENT: Regarding Part IV.G.4.b, how does the permittee ensure the CSO controls will meet CWA requirements and do not cause exceedances of any water quality criteria when other upstream and non-CSO discharges in the drainage basin are also impacting water quality within the receiving waters? [12]

80. COMMENT: Delete the phrase in Part IV.G.4.b "ensure that CSO discharges do not cause exceedances of any water quality criteria, will be protective of the existing and designated uses in accordance with N.J.A.C. 7:9B." This language does not appear in the section *Evaluation of Alternatives* in the National CSO Policy, and appears to assume that the permittee will pursue a "Demonstration" approach. [33] [34]

81. COMMENT: This permit works toward bringing the CSOs into compliance with the WQS yet there are a lot of stormwater discharges where the pollutant loads are significant. Even after all the CSO work is done, WQS may still not be met because of the impacts from stormwater sources. Sewer separation is not the answer since stormwater causes pollution. In one example, by modeling a CSS and turning it into a separate sewer system, pollutant loads increased by 40 to 70 percent for the other parameters (excluding pathogens) since every CSO does not discharge into the river and may go to the STP. [47]

RESPONSE 78-81: The Department agrees that Part IV.G.4.b should be modified regarding attainment of WQS since the Department acknowledges that waterbodies may be impaired due to other sources of pollution other than CSOs. The Department maintains that the language as written can apply to either the Presumption or Demonstration Approach. Revised language is as follows:

"b. The permittee shall submit, as per Section D.3.b.v~~iii~~., the Evaluation of Alternatives Report that will enable the permittee, in consultation with the Department, the public, owners and/or operators of the entire collection system that conveys flows to the treatment works, to select the alternatives to ensure the CSO controls will meet the water quality-based requirements of the CWA, ~~requirements~~, ~~ensure CSO discharges do not cause exceedances of any water quality criteria,~~ will be protective of the existing and designated uses in accordance with N.J.A.C. 7:9B, give the highest priority to controlling CSOs to sensitive areas, and address minimizing impacts from SIU discharges."

This revised language more accurately reflects the Department's intent for this requirement. The Department understands that there can be multiple sources of pollutants in the receiving waters and does not expect that by only controlling the CSO discharges all water quality impairments will be corrected. Please refer to **RESPONSE 70** of Section A of the Response to Comments document regarding additional information on WQS.

With respect to the comment regarding the effects of sewer separation, the Department acknowledges that this alternative, as well as other alternative CSO controls, may not be sufficient to meet WQS. The NJPDES CSO permits require permittees to evaluate all alternatives as part of the LTCP, and then implement the Department-approved LTCP. The Department also seeks to address other discharges of pollution that are precluding waters from

attaining compliance with the SWQS. For example, the Department administers a variety of NJPDES stormwater permits to address pollutants in stormwater discharges for both industries and municipalities. Additional information is available at www.state.nj.us/dep/dwq including a complete list of the MGPs. In addition, the Department is currently preparing the Draft renewal MS4 permit for Tier A municipalities which will further enhance the stormwater controls to be implemented by New Jersey Tier A municipalities.

This change affects Part IV.G.4.b of the Final permits.

82. COMMENT: NRDC supports the permit's requirement to evaluate GI as a CSO control measure on equal terms as other traditional approaches to control CSOs. As detailed in NRDC's 2011 report Rooftops to Rivers II, cities across the country are embracing GI as a cost-effective approach to reducing CSOs, which also provides a wide range of urban sustainability benefits. We encourage the permittees to learn from the experiences of other cities, such as those profiled in Rooftops to Rivers II, and jointly develop an LTCP that maximizes the use of GI. GI is an effective CSO control strategy because it reduces the volume of water in overburdened sewer systems.

Whereas traditional CSO control strategies involve expanding and adding to existing "gray" infrastructure that conveys rainwater away from where it falls and treats it as a waste, GI treats rainwater as a resource and manages it onsite, through features that mimic natural hydrologic functions, such as infiltration into soil, evapotranspiration into the air, and onsite capture for productive use. Unlike gray infrastructure, GI addresses the root cause of CSOs, namely the huge amounts of polluted runoff generated by impervious spaces in the built environment. GI practices, most of which rely on vegetated spaces that absorb runoff, yield many important co-benefits, such as beautifying neighborhoods, cooling and cleansing the air, reducing asthma and heat-related illnesses, and lowering heating and cooling energy costs. [4] [16] [36] [37] [38] [39]

83. COMMENT: The Hackensack Riverkeeper &NY/NJ Baykeeper notes with approval the Department's emphasis on GI in the LTCP requirements. GI is our preferred method for storm water reduction where it is part of a comprehensive strategy to meet WQS. GI is generally less expensive and has the potential to create many side benefits as it reduces stormwater runoff, yet promotes habitat creation, aquifer recharge, flood reduction and reduced cooling and heating costs. The plans should maximize the use of GI. EPA acknowledges support of the specific requirement to evaluate GI as a CSO control alternative in the permits. [3] [11]

84. COMMENT: Part IV.G.4.e.i states that GI allows for "greater" removal of load/flow per gallon captures, but does not state what GI is being compared to. The word "greater" should be deleted. [28] [31]

85. COMMENT: In Part IV.G.4.e.i delete the word "greater" between the words "allows for" and "removal." [20] [32] [35] [40] [42] [44]

RESPONSE 82-85: As specified in Part IV.G.4.e, permittees are required to evaluate a range of CSO control alternatives including GI. The Department acknowledges the comments that

support the use of GI. However, as suggested, the Department agrees to modify Part IV.G.4.e.i as follows:

"i. Green infrastructure ~~(which allows for greater removal of load/flow per gallon captured)~~."

The Department recognizes that GI allows for stormwater management close to its source providing both water quality treatment and volume control by retaining stormwater on-site (e.g. groundwater infiltration). Pollutant reductions are achieved through that portion of the stormwater flow which enters GI.

This change affects Part IV.G.4.e.i of the Final permits.

86. COMMENT: The Department should modify the permits to list "water conservation" as a strategy to be considered in the development of LTCPs as water conservation can reduce the sanitary flow in an overburdened CSS. For example, New York City estimates that reductions in sanitary flow, through successful water conservation measures such as rebates for low-flow toilet replacements, will reduce CSO volumes by approximately 1.7 billion gallons per year (an 8% decrease) by 2030. [4] [16] [36] [37] [38] [39]

RESPONSE 86: The Department agrees that water conservation is an effective measure in reducing the amount of flow in a CSS and encourages all permittees to incorporate water conservation measures in their rules and regulations, ordinances and sewer use agreements. NMC #7 also includes pollution prevention measures where water conservation can be considered as an additional measure. The Department does not agree that water conservation needs to be specifically mentioned under *Evaluation of Alternatives* under LTCP #4 (Part IV.G.4) since it is more appropriately addressed under NMC #7 (Part IV.F.7) as described in **RESPONSE 213** of Section C of the Response to Comments document.

No additional changes have been made to the Final permit(s) as a result of this comment.

87. COMMENT: Delete the first sentence of Part IV.G.4.e.iii since the City of Paterson does not own or operate an STP, which is the subject of this permit. Replace "this information" with "information provided by PVSC." Add "and conveyance" between "treatment" and "capacity." [40]

88. COMMENT: Delete the first sentence of Part IV.G.4.e.iii since NBMUA does not own or operate an STP for the Central Area CSS, which is the subject of this permit. Replace "this information" with "information provided by PVSC and Jersey City." Add "and conveyance" between "treatment" and "capacity." Similarly, PVSC suggests that this sentence be deleted from those NJPDES CSO permits that do not own/operate an STP. [15] [33]

RESPONSE 87-88: The Department maintains that it is appropriate to include all of the LTCP requirements in all of the Final CSO NJPDES permits. Development of the alternatives in Part IV.G.4.e is a collaborative and integrated process between the STPs and the CSO owners.

The Department has clarified the concerns raised by the commenters by adding a new provision at Part IV.G.10 as described in **RESPONSE 6-10** and **RESPONSE 75-77** where both responses are in Section D of the Response to Comments document. In addition, please refer to **RESPONSE 26-42** in Section A of the Response to Comments document for additional information.

The Department agrees that the suggested change to add "and conveyance" between "treatment" and "capacity" serves to clarify the permit condition and has incorporated this change to Part IV.G.4.e.iii as follows:

> "iii. STP expansion and/or storage at the plant (an evaluation of the capacity of the unit processes must be conducted at the STP resulting in a determination of whether there is any additional treatment and conveyance capacity within ~~available at~~ the STP). Based upon this information, the permittee shall determine (modeling may be used) the amount of CSO discharge reduction that would be achieved by utilizing this additional treatment capacity while maintaining compliance with all permit limits."

This change affects Part IV.G.4.e.iii of the Final permits.

89. COMMENT: Regarding Part IV.G.4.e.iii, insert "determined by the owner/operator of the STP" after "Based on information." [15] [20] [32] [40] [42] [44]

RESPONSE 89: The Department agrees that this information would generally have to be provided by the owner of the STPs in order for all of the permittees in each hydraulically connected sewer system to be able to complete their evaluation of alternatives. However, it does not agree that the language in the permit needs to be revised as the previous sentence references that this information originates from the STP. Again, all permittees in each hydraulically connected sewer systems are required to work cooperatively in the development of the LTCPs and this information can either be completed by the STP owners in the final LTCPs, if all parties have agreed to cooperatively submit one comprehensive LTCP for each system, or the STP owners will have to provide this information to the other CSO permittees in their system. Please refer to Part IV.G.10 and to **RESPONSE 26-42** in Section A of the Response to Comments document for additional information.

No changes have been made to the Final permit(s) as a result of this comment.

90. COMMENT: Should the reference to "Section D.4" as it appears in Part IV.G.4.e.iii instead be to "Section F.4.?" [6]

RESPONSE 90: This comment refers to the CCMUA, City of Gloucester and City of Camden CSO NJPDES permits. The commenter is correct in that there is an erroneous reference to Section D.4 which was corrected in all NJPDES CSO permits issued after these three permits. This error has been rectified in these three permits as follows (including the change discussed in the previous comment):

"iii. STP expansion and/or storage at the plant ~~(based on information provided by the STP as per Section D.4.,~~ (an evaluation of the capacity of the unit processes must be conducted at the STP resulting in a determination of whether there is any additional treatment and conveyance capacity within ~~available at~~ the STP). Based upon this information, the permittee shall determine (modeling may be used) the amount of CSO discharge reduction that would be achieved by utilizing this additional treatment capacity while maintaining compliance with all permit limits."

This change affects Part IV.G.4.e.iii of the Final permits for CCMUA (NJ0026182), City of Gloucester (NJ0108847) and City of Camden (NJ0108812).

91. COMMENT: Insert "Excessive" before "I/I." [15] [20] [29] [32] [33] [34] [35] [40] [42] [44]

92. COMMENT: The reference to I/I in Part IV.G.4.e.iv should be revised to read "excessive I/I." [28] [31]

93. COMMENT: Add "Excessive" to the phrase "I/I reduction ... " in Part IV.G.4.e.iv. [15]

RESPONSE 91-93: The Department agrees that modifications to this permit condition are appropriate consistent with the rationale described in **RESPONSE 45-52** of Section C of the Response to Comments document. Accordingly, Part IV.G.4.e.iv is revised as follows:

"iv. I/I reduction to meet the definition of non-excessive infiltration and non-excessive inflow as defined in N.J.A.C. 7:14A-1.2 in the entire collection system that conveys flows to the treatment works to free up storage capacity or conveyance in the sewer system and/or treatment capacity at the STP, and feasibility of implementing in the entire system or portions thereof."

This change affects Part IV.G.4.e.iv of the final permits.

94. COMMENT: Expansion of the STP or storage of flow is part of the CSO control alternatives. This will clearly require coordination between the Town of Guttenberg and the NBMUA. In addition, any treatment of the discharge from the CSO pipe for the Town of Guttenberg will either have to be done under the street at 70th Street and Boulevard East or down at the joint municipal park on River Road next to the riverfront walkway. Either location will be difficult to access resulting in considerable costs and time needed to do so. [29]

RESPONSE 94: These comments address an issue that will be the focus of LTCP development by NBMUA and the Town of Guttenberg, i.e. how the costs of treatment at the point of discharge compare with other alternatives for reducing CSO flows. The Department understands the coordination and the complexities that will be involved in determining viable solutions to reducing or eliminating the CSO discharges.

No changes have been made to the Final permit(s) as a result of this comment.

95. COMMENT: Part IV.G.4.e.vii authorizes NHSA to evaluate a CSO bypass (per the National CSO Policy) as one of the LTCP alternatives. Given that the Department indicates that this option is prohibited by state law, it is not apparent why this option is allowed to be assessed. The Department should determine whether this earlier adopted state rule was intended to restrict options otherwise authorized or mandated by the federal National CSO Policy to protect public health or otherwise allowed by the NJPDES rules.

The River Road Draft Permit and the Adams Street Draft Permit indicate that a change in regulation would be required to allow NHSA to bypass. We believe the Department is mistaken regarding bypass in the CSO context, as the Department incorporated the federal program requirements into its rules. Furthermore, the Department fails to address that pursuant to its regulations, NHSA can utilize non-biological approaches (i.e., maximize flows to the primary units, divert excess peak flows around the biological unit, recombine, disinfect, and still meet permit limits). N.J.A.C. 7:14A-13.12(a)3, expressly allows POTWs to modify their permit limitations and utilize excess primary capacity if they are maximizing flow to a plant as a means to reduce CSOs, whether through non-biological peak flow processing or, if permit limits cannot be met, through a bypass:

(a) An applicant or permittee may request effluent limitations less stringent than those required by N.J.A.C. 7:14A-13.3, 13.4 or 13.6, which are applicable only during periods of excessive effluent flow due to precipitation events, provided one or more of the following criteria is met:

3. The facility receives flow from combined sewers. In such cases the permittee *shall be required to maximize the flow to the treatment facility* and minimize the flow through the combined sewer overflow. The permittee shall evaluate and implement options for eliminating the extraneous flow. *The options to be explored* shall include, but shall not be limited to, reducing or eliminating one or more overflows, *providing a reduced level of treatment for a portion of the flow*, and, in some cases, separation of the sanitary and storm sewers. The permit shall include a schedule addressing reduction or elimination of the excess flow as appropriate. Any discharge from combined sewer overflows shall be consistent with the USEPA final policy for combined sewer overflows. See 59 Fed. Reg. 18688 (April 19, 1994), which is incorporated at N.J.A.C. 7:14A-11 Appendix C.

Consistent with such an approach, the Draft NJPDES permits recognize that the National CSO policy would require maximizing the flows to be treated at the NHSA STP, including the use of a CSO bypass to accomplish that goal. However, the prohibition in N.J.A.C. 7:14A-23.13(m) applies to "untreated or partially treated wastewater to be discharged." In NHSA's situation, the blended wastewater would meet the NJPDES permit effluent limitations. As such, the blended effluent would be neither "untreated" nor "partially treated wastewater" as intended by this rule. The plant is designed to treat peak flows and meet permit limits through non-biological peak flow processing, which is otherwise authorized in the NJPDES rules. [25]

96. COMMENT: Section G.4.e.vii authorizes JMEUC to evaluate CSO bypass (per the National CSO Policy) as one of the LTCP alternatives. The Fact Sheet, however, indicates that such option is currently prohibited by state law, so it is not apparent why this option is allowed to be assessed. The Department should determine whether this earlier adopted state rule was intended to restrict options otherwise authorized or mandated by the federal National CSO Policy to protect public health. [9]

97. COMMENT: Regarding the River Road facility, several discharge options presently exist to allow for increased CSO flow processing and avoidance of public exposure to untreated wastewater. To ensure NMC compliance and LTCP implementation in the timeliest fashion, the ability to employ a CSO bypass or simply meet applicable effluent limits for this combined discharge to the Hudson River should be clarified. [25]

98. COMMENT: The City of Elizabeth maximizes the flow to JMEUC. What takes place at JMEUC has a significant impact upon the City in terms of the conveyance capabilities to the Trenton Avenue pump station as we are regulated in how much we can discharge. Therefore, we have a vested interest in blending because it will have an impact on the City of Elizabeth. [8]

99. COMMENT: The Department should consider adding additional detail from the National CSO Policy to help further clarify Part IV.G.4. As stated in the National CSO Policy, "[f]or approval of a CSO related bypass, the long-term CSO control plan, at a minimum, should provide justification for a cut-off point at which the flow will be diverted from the secondary treatment portion of the treatment plant, and provide a benefit-cost analysis demonstrating that conveyance of wet weather flow to the POTW for primary treatment is more beneficial than other CSO abatement alternatives such as storage and pump back for secondary treatment, sewer separation, or satellite treatment" (18693 FR /Vol. 59, No. 75). In the Draft permit Fact Sheet, the Department states that the "National Policy encourages permittees to consider the use of a bypass of secondary treatment in the evaluation of alternatives." It is more accurate to say "allows" rather than "encourages." [5] [11]

100.COMMENT: The Fact Sheet also notes that NJ regulations prohibit bypass and states that the Department "recognizes that the rule would need to be modified in order to allow bypasses as part of an approved LTCP." Under 40 CFR 122.41(m)(4), bypass is prohibited, but the rule provides for enforcement discretion where: the permittee shows that the bypass was unavoidable to prevent loss of life, personal injury or severe property damages; the permittee shows that there was no feasible alternative to the bypass; and the permittee submitted the required notice.

The Fact Sheet states under the *Evaluation of Alternatives* that in order for the Department "to consider a by-pass as a feasible alternative ..." This is inaccurate. The Fact Sheet should state, "in order for bypassing to be considered it must be demonstrated that there are no feasible alternatives to bypass."

The "no feasible alternative" analysis should be included in the LTCP. The National CSO Policy describes what this analysis should entail in more detail. [5] [11]

RESPONSE 95-100: In a letter to the Department dated October 9, 2014, Kate Anderson, Chief of EPA's Region 2 Clean Water Regulatory Branch, confirmed that blending of primary and secondary treated flows to meet existing effluent limitations may be allowed through a CSO permit if the proposal satisfies the factors described in Part II.C.7 of the CSO Control Policy, 59 Fed. Reg. at 18693-94, and those at 40 C.F.R. § 122.41(m). As stated:

> "NJDEP may provide a reopener clause in the reissued permit that would allow the permit to be reopened to add language approving a CSO related bypass [if the permittee] submits information demonstrating that the requirements in 40 CFR § 122.41(m)(4)(i) have been met. If the permit is reopened and modified to include a preapproved bypass, the approval would need to set conditions for when and how an approved bypass would occur."

If the permittees' no feasible alternatives analysis shows that blending would be appropriate during the term of this permit, and after examination of any adverse effects, the Department will consider a major permit modification to allow a deviation under N.J.A.C. 7:14A-23.2(b) from the prohibition against bypassing any portion of the treatment works at N.J.A.C. 7:14A-23.13(m) for CSO STPs. The Department maintains that this would constitute new information that meets the criteria of N.J.A.C.7:14A-16.4(b)2, thereby constituting cause for major modification or revocation and renewal of a permit.

Under Part IV.G.4.e.vii of the CSO permit, as part of their LTCP, permittees are required to evaluate alternative wet weather treatment protocols for reducing CSO events by maximizing the use of primary treatment capacity at the STP to meet the National CSO Policy's goal of making the greatest use of using existing plant infrastructure. Specifically, permittees shall also evaluate the feasibility of using the plant's excess primary treatment capacity with disinfection and dechlorination to increase the amount of primary treatment for flows that would otherwise be discharged through CSOs, while still meeting the STP's effluent limitations.

Although the Fact Sheets of the Draft permits state that the rule at N.J.A.C. 7:14A-23.13(m) would need to be modified to allow bypasses as part of an approved LTCP, the Department has reevaluated these rules and have found that an exemption is allowable under N.J.A.C. 7:14A-23.2(b). Such alternative wet weather treatment protocols may only be considered for STPs that receive combined sewer flows to meet the STP's effluent limitations, and may only be granted as a modification to the plant's CSO NJPDES permit. In such cases, the STP permittees may apply to the Department for a permit modification to include specific conditions when blending may be allowed under N.J.A.C. 7:14A-16.4 and -23.2(b).

N.J.A.C. 7:14A-13.12 applies to requests to modify wet weather effluent limitations and is not addressed by the CSO NJPDES permits and requires consideration of additional criteria described in the rule.

No changes have been made to the Final permit(s) as a result of these comments.

101. COMMENT: Clarification is needed on the potentially authorized discharge locations for JMEUC. Several discharge options presently exist to allow for increased CSO flow processing and avoidance of public exposure to untreated wastewater, yet only one of these

points is authorized by the Draft permit. To ensure NMC compliance and LTCP implementation in the timeliest fashion, the ability to employ a CSO bypass to the Elizabeth River should be allowed. [9]

RESPONSE 101: While it is premature to evaluate a CSO control alternative independent of the complete LTCP, it appears that the permittee is requesting that the Department consider a CSO bypass to the Elizabeth River. However, it is unclear as to whether or not this suggested bypass would be routed to a permitted outfall or to an alternative discharge location not currently authorized in the NJPDES CSO permit.

With respect to the issue of blending, please note that blending is intended to be utilized at the existing STP outfall since compliance with all existing NJPDES permit parameters is required. Any alternate discharge location would require authorization through a separate NJPDES permit action, including the development of the appropriate limits as well as a WQMP amendment, and would be subject to other rules and regulations.

No changes have been made to the Final permit(s) as a result of this comment.

102. COMMENT: The preamble statements made by EPA and cited to by the court in *Iowa League of Cities v. EPA*, 711 F.3d 844 (8th Cir. 2103) state that the federal bypass rule's purpose is to "ensure that users properly operate and maintain their treatment facilities . . . [pursuant to applicable] underlying technology-based standards," "by requiring incoming flows to move through the facility as it was designed to be operated" and "[l]ike the more general secondary treatment regulations, the bypass rule does not require the use of any particular treatment method or technology." With the permit effluent limitations establishing the threshold for the level of treatment required, as long as the blended effluent meets the permit limits it would neither fall under the N.J.A.C. 7:14A-23.13(m) prohibition nor the bypass provision. [25]

103. COMMENT: How does the emergency discharge provision of the NJPDES rules and the decision in *Iowa League of Cities v. EPA*, 711 F.3d 844 (8th Cir. 2013) apply at these POTWs for peak flow management, outside the federal/CSO bypass procedures? [9] [25]

104. COMMENT: If NHSA were to combine the existing 002 and 001 discharges to ensure full disinfection and, if necessary, dechlorination, and then discharge the combined flows out the existing outfall, NHSA would be in full compliance with the existing NJPDES limitations. Under *Iowa League of Cities v. EPA* and based upon Department precedent, this does not constitute a bypass under either state or federal law. [25]

105. COMMENT: Further insight is needed as to how the emergency discharge provisions of the NJPDES rules, National CSO Policy and Iowa League case affecting federal bypass provisions applicable to STPs interact with and identify allowable peak flow management approaches. It would seem that there is greater justification to process peak flows given the Iowa League decision. Clarification would save considerable resources in addressing LTCP objectives. [48]

RESPONSE 102-105: EPA's bypassing rule at 40 C.F.R. § 122.41(m) was upheld in an earlier federal appellate decision in *NRDC v.* EPA, 822 F.2d 104 (D.C. Cir. 1987). EPA maintains that the decision in *Iowa League of Cities v. EPA*, 711 F.3d 844 (8th Cir. 2013) is at odds with the D.C. Circuit's longstanding ruling on EPA's bypassing rule and EPA has determined that the *Iowa League of Cities* decision is only applicable in the 8th Circuit. To date, for the remainder of the nation outside the 8th Circuit, intentionally diverting flow around treatment processes will be considered a prohibited bypass unless the conditions of 40 C.F.R. § 122.41(m) are satisfied. This policy was reiterated in a letter dated October 9, 2014, from Kate Anderson, Chief, Clean Water Regulatory Branch, EPA Region 2, responding to a similar request from PVSC. Ms. Anderson's letter is part of the administrative record.

Moreover, Section 510 of the CWA provides that state rules will supersede less stringent federal regulations. 33 U.S.C.A. § 1370. The Department's NJPDES rules, which are promulgated under New Jersey's WPCA, N.J.S.A. 58:10A-1 et seq., may restrict or prohibit bypassing in circumstances that might otherwise be permissible under federal law. Permittees are required to comply with the more stringent of the federal regulations and the Department's regulations before a bypass may be permitted. Please refer to **RESPONSE 95-100** in Section D of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of these comments.

106. COMMENT: Blending has the potential to provide immediate environmental and public health benefits to the local community, in accordance with the federal National CSO Policy. As necessary, the Department could grant a waiver to N.J.A.C. 7:14A 23.13(m) that addresses facility design to accomplish this goal. We request the Department's input and evaluation of these issues prior to the finalizing of this Draft permit. [25]

RESPONSE 106: Although the Fact Sheets of the Draft permits state that the rule at N.J.A.C. 7:14A-23.13(m) would need to be modified to allow bypasses as part of an approved LTCP, the Department has reevaluated these rules and has found that an exemption is allowable under N.J.A.C. 7:14A-23.2(b). Such alternative wet weather treatment protocols may only be considered for STPs that receive combined sewer flows to meet the STP's effluent limitations, and may only be granted as a modification to the CSO NJPDES CSO permit. In such cases, the STP permittees may apply to the Department for a permit modification to include specific conditions when blending may be allowed under N.J.A.C. 7:14A-16.4 and -23.2(b).

Waivers are considered only on a case-by-case basis. The Department will not consider or pre-judge whether a deviation or "waiver" is appropriate without a specific application that provides the information required by N.J.A.C. 7:14A-23.2 and/or N.J.A.C. 7:1B-2. Please also refer to **RESPONSE 95-100** concerning blending of Section D of this Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

107. COMMENT: The seventh bullet in the PVSC NJPDES permit discusses CSO related bypasses of the secondary treatment portion of the STP as a CSO control alternative that can be

considered. However, the PVSC NJPDES permit includes Monitor and Report requirements for CBOD and TSS during wet weather and defines the "MR" requirement to apply to a designated daily average flow to be determined. When and how will that flow be determined? Is this language intended to encourage wet weather bypass at PVSC as a CSO control strategy? [28] [31]

RESPONSE 107: The commenter is referring to the seventh bullet under the LTCP #4 section of NJPDES permit NJ0021016 which requires permittees to consider CSO related bypasses of the secondary treatment portion of the STP in accordance with the National Policy.

Please refer to the previous **RESPONSE 106** as well as in **RESPONSE 3** of the Category A Section of the PVSC permit (NJ0021016). Note that the Sanitary Wastewater Response to Comments document is included in the PVSC permit and is separate from this Category CSM Response to Comments document.

108. COMMENT: For the River Road facility, the implementation of non-biological approaches and other NMC/LTCP maximization of treatment requirements may require consideration of chlorine demand to allow intermittent processing of much greater peak wastewater flows. The discharge of less than fully dechlorinated wastewater on an intermittent basis has never been evaluated for this facility. The current chlorine limits are based on a continuous discharge assumption with no consideration of the rapid detoxification that occurs to chlorine due to the chlorine demand of the receiving water. Chlorine demand, which was not considered in setting the existing facility permit limits, allows for a higher discharge of chlorine to safely occur. This condition was accounted for in setting the coastal community chlorine requirements and for PVSC.

NHSA is in the initial stages of conducting a chlorine demand analysis and, depending upon those results, will request that the Department consider accounting for chlorine demand in the present permit (following the completion of a Department approved work plan for this parameter). Because the consideration of chlorine demand could allow for much greater treatment of peak flows without significant changes to the existing wastewater facilities, we request that a chorine demand analysis provision be added to the CSO section of the permit. [25]

RESPONSE 108: The Department acknowledges that the commenter may choose to submit a chlorine demand study. This study would allow for chlorine demand to be considered in the derivation of revised NJPDES chlorine effluent limits. Please note that the permit does not need to be modified to allow a permittee to conduct such a study. Any such study would need to be conducted under the conditions set forth in a Departmental approved QA/QC work plan. The Department thanks the commenter for evaluating and exploring engineering solutions to address peak wet weather flows.

No changes have been made to the Final permit(s) as a result of this comment.

109. COMMENT: Part IV.G.4.f.i indicates that the Presumption Approach may be used but only if "no more than an average of four overflow events [60 month rolling average] per year" will

occur. While JMEUC is not responsible for addressing this CSO discharge compliance issue, it is noted that the four per year overflows is allowed to be up to six per year and that it should be reflective of the long term average condition. This should not be specified as a five year rolling average that can be skewed by several wetter than average years occurring in a row or group. [9]

110. COMMENT: It is noted that the four per year overflows should be changed to allow up to six per year pursuant to the National CSO Policy. In addition, the Presumption Approach should be reflective of the long term average condition, instead of a 5-year rolling average that can be skewed by several wetter than average years occurring in a row or group. [25]

111. COMMENT: Part IV.G.4.f.i defines one of the criteria of the Presumption Approach as limiting overflows to four events per year and then states that "the Department may allow up to two additional overflow events per year." Does the Department's discretion of allowing up to two additional overflow events per year mean that the 60 month rolling average may be six events per year, or that no single year can exceed six overflow events? [28] [31]

112. COMMENT: Regarding Part IV.G.f.i, remove the sentence: "These four overflow events shall be calculated over a 60 month rolling average, provided that the Department may allow up to two additional overflow events per year." The addition of two overflow events per year, as allowed by the National CSO Policy, should be stated up front in the first sentence that states the criteria for average number of overflow events per year. Second, the EPA guidance allows for alternate methods for determining the number of overflow events. We suggest replacing this sentence with: "The average number of overflow events per year shall be calculated in accordance with EPA LTCP guidance." The elimination of the two additional overflows per year would reduce flexibility; therefore, we recommend that the Department explicitly grant the additional two overflow events as allowed by the National CSO Policy. [33] [34]

113. COMMENT: This phrase Part IV.G.4.f.i is very unclear and does not appear in either the National CSO Policy or in state regulations. Compliance with the requirement of "No more than an average of four overflow events per year,…." can be determined in many ways. It is too early in the LTCP permitting process to determine the proper method of determining compliance for each permittee. Therefore, please delete the phrase "calculated over a 60 month rolling average" from this section. [35] [42] [44]

114. COMMENT: The permit proposes that the design year be continuously recalculated as a five year rolling average. This recalculation changes the meaning of an average year, is not in accordance with the National CSO Policy, EPA "CSO Guidance for Monitoring and Modeling" section 7.5.3 as well as N.J.A.C. 7:14A-ll Appendix C. Therefore, the phrase "these overflow events shall be calculated over a 60 month rolling average" should be removed from the permit. [6] [15]

115. COMMENT: Part IV.G.4.f.i is not in conformance with the National CSO Policy or State regulations. There is nothing in the National CSO Policy regarding "calculated over a 60 month rolling average." It is too early in the permitting process to establish a compliance

methodology, which should be contained in a later permit when the method adopted for CSO control is known. [42] [44]

116. COMMENT: Paragraph f.i refers to the Presumption Approach and includes the phrase "No more than an average of four overflow events (see below) per year…" The National CSO Policy and state regulations state "No more than an average of four overflow events per year, *provided that the permitting authority may allow up to two additional overflow events per year."(emphasis is added).* Why was the phrase "provided that…events per year" omitted from this section?

The policy and the permit require that a cost performance analysis be performed to "determine where the increment of pollution reduction achieved in the receiving water diminishes compared to the increased costs." The elimination of the additional two overflow events reduces the flexibility and creativity that was built into the National CSO Policy and may result in excessive costs without commensurate improvements in water quality. We recommend that the language be returned to the original language in the National CSO Policy. [20] [29] [32] [35] [40] [42] [44]

117. COMMENT: By eliminating the phrase "provided that the permitting authority may allow up to two additional overflow events per year" in Part IV.G.4.f.i the Department is effectively proposing to require a more stringent Presumption Approach than required by the federal National CSO Policy. Given the frequency of CSS overflows that occur under existing conditions, four overflows per year will certainly not be possible to achieve. NBMUA urges the Department to grant the suggested flexibility of two additional overflow events per year for the Presumption Approach. The policy and this permit require that a cost performance analysis be performed to "determine where the increment of pollution reduction achieved in the receiving water diminishes compared to the increased costs." [33] [34]

118. COMMENT: How will the Presumptive Approach be assessed statistically? Will it be four per year as a maximum or average? [9] [25]

RESPONSE 109-118: In Part IV.G.4.f, the Presumption Approach is described as a CSO control program that meets any one of three specified criteria. A permittee that meets any three of the presumption criteria is presumed to have provided an adequate level of control to meet the water quality-based requirements of the CWA; so long as 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 is in consideration of sensitive areas. The first criterion is:

"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. These four overflow events shall be calculated over a 60 month rolling average, provided that 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."

Based on the comments provided, the Department has revisited this condition and has determined that inclusion of the 60 month rolling average is problematic for a number of reasons, most notably that it sets a moving target with respect to engineering design conditions. As a result, the Department has revisited the definition in the National CSO Policy and has revised the condition as further described below in this response. The Department has revised the condition to clarify these circumstances as follows:

"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. ~~These four overflow events shall be calculated over a 60 month rolling average, provided that the~~ The Department may allow up to two additional overflow events per year. For the purpose of this criterion, an 'event' is:…"

Many commenters request that the language regarding four overflow events per year be revised to allow up to six overflow events per year, consistent with the National CSO Policy as described as follows:

"No more than an average of four overflow events per year, provided that the permitting authority may allow up to two additional overflow events per year. For the purpose of this criterion, an overflow event is one or more overflows from a CSS as the result of a precipitation event that does not receive the minimum treatment specified…"

Up to six events is included in the permit at Part IV.F.4.f.i. However, this provision is not intended to be an automatic allowance for six overflow events per year. The National CSO Policy directs permittees to design for no more than four overflow events based on an average rainfall design year. The Department may exercise its discretion to approve an LTCP based on up to six events in the average rainfall design year. The permittee must provide an analysis of the incremental cost-benefit of additional controls needed to meet four events per year and show a design based on up to six events in the average rainfall design year will reasonably provide an adequate level of control to meet the water quality based requirements of the CWA.

The Department does not agree it is necessary to rewrite the language in this section of the permit to exactly match the language in the National CSO Policy. Specifically, the Department has further defined the word "event" to ensure that the permit condition is clear for compliance and design purposes. It is within the Department's authority to refine or clarify the conditions in the National CSO Policy in order to ensure that the permit requirements are measureable and enforceable, provided that the Department's implementation is at least as

stringent as the measures required by the National CSO Policy. The Department maintains that the permit condition as revised is consistent with the intent of the National CSO Policy.

This change affects Part IV.G.4.f.i of the Final permits.

119. COMMENT: The average rainfall year is determined by a statistical analysis of the long term rainfall record where that year then becomes the design rainfall year. A continuous sewer system model is run with the design year rainfall as the input. The output of the model is the number of overflows produced by the design year's rainfall. Control measures are selected and sized to meet the "four overflows in the average year" based upon the design rainfall year.

Historically, the design year for CSO Facility Planning Projects was determined through evaluation of 30 years or greater of measured rainfall data. Since the design and construction of a CSO treatment facility is expensive and anticipated to last an extended period of time (i.e. 30 to 40 years) an analysis of long-term rainfall records is considered not only appropriate but also necessary for the proper design of a CSO treatment facility. In recent years, the 1988 rainfall recorded at JFK airport has been considered to represent average yearly conditions throughout NY/NJ Harbor. This selection was based on over 30 years of rainfall statistics, including rainfall volume, intensity, duration, and time between storms. However, using a short term record of analysis (i.e. 60 months as proposed) could compromise the results. For example, the 33 year average rainfall volume at JFK (1970 thru 2002) is 41 inches. Using the same time period, the five year moving average rainfall volume ranges from 38.8 to 46.6 inches. This illustrates that there is a significant difference between averaging periods that could also significantly impact engineering design. It is noted that in this analysis, there is no apparent temporal trend in the five year moving averages; therefore, climate warming is not a factor (the minimum and maximum five-year averages occurred in the years ending in 1974 and 1979, respectively – both toward the beginning of the 33 year analysis period). Therefore, a 60 month moving average rainfall analysis could result in a CSO abatement plan that is not the most cost-effective or may not accomplish the goal of the program. A recalculation of the average rainfall year utilizing recent rainfall data is already required by the permit.

The example given above only considers rainfall volume in the analysis. However, an overflow event is also a function of rainfall intensity, duration, time between storms and sewer system configuration. Due to the complexity of the mechanisms that determine an overflow event, overflow analyses are evaluated using Department approved hydrologic and hydraulic models. Therefore, is it the intent of the Department to re-run these models on a monthly basis? It is also not practical and could be very costly to have a design criterion that is constantly changing. If the design criterion is not established early in the engineering design phase, excessive time and money could be wasted. [6] [15]

120. COMMENT: We support historically that the design year for CSO facility planning projects was determined through evaluation of 30 years or greater of measure rainfall data. As specified in Part IV.G.4.f.i, setting a 60 month moving average rainfall as the basis of design, rather than the historical 30 years or greater, will create a design criteria that can vary by as much as 12 inches on an annual basis from one five year period to the next. This design criteria variation is 28% higher than the longer term annual average rainfall over 30 years or

more. This design variation is too large, especially, for these types of CSO control facilities that tend to be very large and have high capital costs. If a 60 month rolling average criteria is used, a CSO control facility built for a five year average ten years earlier is more likely to have violations of this five year rolling average criteria that is calculated five to ten years in the future. So in this case, would the facility be considered to be in need of an upgrade in less than a standard design life of 20 years, or will the facility be presumed to be in compliance unless water quality violations are proven?

If a shorter term rainfall average is the goal, then it should be one that does not have such extreme variation as a five year rolling average. For example, a 30 year average of rainfall records from JFK or Newark airport data would be more reasonable, and less sensitive to variation, yet it would eliminate the records beyond 30 years that may not be applicable to the current climate conditions. [30]

121. COMMENT: The phrase "These four overflow events shall be calculated over a 60 month rolling average,.." is very unclear. An average rainfall year is established during the characterization phase of the LTCP based upon long term rainfall patterns. That year then becomes the design average rainfall year. Controls are designed to limit the number of overflows that would occur in the design rainfall year to four or more as determined by the LTCP. Compliance with the number of overflow criteria for any year is determined by running the model on that year's rainfall pattern and comparing the resulting number of model computed overflows with actual number of overflows that occurred in that year. If in agreement, the computer model is deemed to be accurate, and therefore it will be assumed that in the design average year compliance was attained.

What is the calculation referenced in the permit? What is averaged? The permit refers to "a 60 month rolling average." Does the design year change every month? Please clarify this language, which drastically changes the interpretation of "average." [20] [29] [32] [40]

122. COMMENT: Regarding the phrase "… provided that the Department may allow up to two additional overflow events per year," does this refer to number of overflows allowed in the design rainfall year? We recommend that this phrase be relocated to the sentence as written in the National CSO and state regulations. [20] [32] [40]

RESPONSE 119-122: Permittees relying on the Presumptive Approach should design the LTCP based on the "average rainfall year" to show that, after implementation of the NMCs and LTCP controls, no more than four CSO events will occur in the average rainfall year. If the permittee determines the chosen average rainfall year is no longer indicative of current climatological conditions, the permittee may propose an alternate average rainfall year and revise its LTCP accordingly. Please refer to **RESPONSE 109-118** of Section D of this Response to Comments document for information regarding the number of overflows allowed in the design rainfall year.

Regarding the 60 month rolling average, as described in the previous response, the Department has deleted the requirement for compliance based on a 60 month rolling average in recognition of the concerns raised by the commenters.

As described in the previous response. Part IV.G.4.f.i has been changed in the Final permits.

123. COMMENT: Part IV.G.4.f.i states in part "In a hydraulically connected system …only one CSO outfall…periods of overflow is no more than 24 hours…" This phrase changes the meaning of an overflow event as defined in the National CSO Policy and N.J.A.C. 7:14A 11 Appendix C. It is defined as "For the purposes of this criterion, an overflow event is one or more overflows from a CSS as the result of a precipitation event…" It is possible for a precipitation event to last far more than 24 hours, with periods of intense rainfall interspersed with periods of light rainfall. This scenario may produce a number of discrete overflows occurring over more than a 24 hour period. Although a 24 hour overflow event is extremely rare, it may exceed the 24 hour limit by a few hours.

Please cite the guidance and the reasons for this change in the definition of "overflow event." We request that the sections relating to the 24 hour time period, for both single and multiple outfalls, be removed from the permit. [6] [15]

RESPONSE 123: The National CSO Policy does not address the duration of "overflow event", nor does it address the definition of a "precipitation event." For the purposes of designing an LTCP for a specific goal of four or more overflows per year, it is necessary to define these terms in a consistent manner as applicable to all NJPDES CSO permittees. The term "event" has been defined for the purposes of the Presumption Approach, where the Department has imposed a time limit between precipitation events such that a discrete measure of an event can be determined. For example, if a rainfall were to occur intermittently over a 48 hour period where the discharge did not cease for a period of at least 24 hours, this would be considered one event. In other words, there must be a 24 hour period where the discharge has ceased in order for a new "event" to begin.

No changes have been made to the Final permit(s) as a result of this comment.

124. COMMENT: How can the Presumptive Approach analyses require consideration of standards that are not yet adopted (TMDLs or EPA Recreational WQS)? NPDES rules require all analyses to be based on the existing regulatory requirements at 40 CFR 122.43. [9] [25]

RESPONSE 124: The LTCP analyses should be based on existing regulatory requirements in effect at the time. However, as stated in the Fact Sheet under the description for the Demonstration Approach:

> "The permittee will be required to evaluate a range of CSO control alternatives, based on their practical and technical feasibility, and the water quality benefits of constructing and implementing various remedial controls and combinations of such controls. The permittee should be prepared to address any future changes in the WQS. For example, on November, 26, 2012, EPA recommended new recreational water quality criteria for pathogens. NJDEP will be evaluating these new criteria and considering a proposal to incorporate them within the next 3 years."

The recreational standards for bacteriological indicators for pathogens may change over the course of the permit which could impact the design conditions for the CSO control alternatives. While permittees should be prepared to address any future changes in the WQS, this does not mean that permittees are required to demonstrate compliance with future standards that are not defined at this present time under either the Presumption or Demonstration Approach.

No changes have been made to the Final permit(s) as a result of these comments.

125. COMMENT: Part IV.G.4.f makes the assumption that CSO controls will lead to compliance with WQS. However it has been demonstrated in various parts of the country that this presumption does not take into account other pollutant sources within the drainage basin. Will the Department eliminate the need to do additional work if the post construction monitoring still shows non-compliance with WQS provided that the presumption requirements limiting volume or the number of discharges were met? [12]

RESPONSE 125: Neither the permit nor the National CSO Policy require CSO permittees to single-handedly reduce pollutant loads in the receiving waters where background levels preclude attainment of the WQS irrespective of CSO impacts. Under the Presumption Approach, the CSO control program is "presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA" by adopting one or more of the three control strategies described at Part IV.G.4.f. N.J.A.C. 7:14A-11, Appendix C, II.C.4.a. The presumption must be "reasonable" in light of the permittees characterization, monitoring, and modeling of the system, but permittees are not required by this permit to reduce impacts on the receiving waters beyond the pollutant loads attributable to CSO discharges.

However, CSO discharges may not preclude attainment of the WQS. If the Presumption Approach is followed but CSO discharges will still cause an exceedance of WQS, then further reductions are mandated by the CWA and the National CSO Policy. The same is true of the Demonstration Approach. Permittees must show that CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment as per Section II.C. of the National CSO Policy.

Finally, if, despite appropriate CSO controls, WQS cannot be achieved, the permittee may petition the Department for a revision to the WQS after conducting a Use Attainability Analysis as described in Part III of the National CSO Policy.

Please refer to **RESPONSE 63** in Section A of the Response to Comments document which describes how the technology-based and water quality-based standards may be satisfied by CSO permittees as well as **RESPONSE 70** of Section A of the Response to Comments document which concerns meeting WQS.

No changes have been made to the Final permit(s) as a result of this comment.

126. COMMENT: If a DWO occurs, does that count as one of the four overflows per year as per Part IV.G.4.f.i? [35]

RESPONSE 126: A DWO would not be considered as one of the four overflow events per year since, by definition, it would not be occurring as a result of a precipitation event. However, any DWO would be a violation of the permit and would have to be reported in accordance with the non-compliance reporting requirements at N.J.A.C. 7:14A-6.10.

No changes have been made to the Final permit(s) as a result of this comment.

127. COMMENT: In Part IV.G.4.f.ii does system-wide mean the same as hydraulically connected? Does "annual" mean calendar year, 12 month period or 60 month rolling period? [35]

RESPONSE 127: The reference to system-wide is meant to be synonymous with the term "hydraulically connected system" where the language in the Final permit has been revised as follows:

"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."

Regarding whether "annual" means calendar year, 12 month period or 60 month rolling period, permittees should use "annual" as a 12 month average as the design standard when developing the CSO control alternatives for the LTCP. The permittee should design the LTCP in consideration of an average rainfall event where the system is designed for 85% removal. Again, the condition regarding a 60 month annual average has not been retained in the Final permits.

This change affects Part IV.G.4.f.ii of the Final permits.

128. COMMENT: Part IV.G.4.f.ii indicates that the Presumption Approach may be used but only if "no more than an average of four overflow events [60-month rolling average] per year" will occur. If 85% capture is met (an alternative presumptive measure), the number of remaining CSO events is not otherwise limited. This provision should be revised accordingly. [25]

RESPONSE 128: The Department agrees that the number of overflow events per year is not limited if the 85% capture of combined sewage by volume or mass is met. This is evidenced by the language in Part IV.G.4.f which states, "A program that meets any of the criteria listed below…" Inclusion of the word "any" makes it clear that any of three criteria will suffice for meeting the Presumption Approach.

No changes have been made to the Final permit(s) as a result of this comment.

129. COMMENT: Paragraph G.4.f.ii defines one of the criteria of the Presumptive Approach to be 85% capture of the combined sewage collected. However the Fact Sheet states that 85%

capture of the combined sewage flow/mass. Does 85% removal apply to volume or mass or both? What water quality parameters does 85% mass removal apply to? [28] [31]

RESPONSE 129: The National CSO Policy and N.J.A.C. 7:14A-11 Appendix C contain three criteria that may be chosen by a permittee under the Presumption Approach when developing a final LTCP. The first criteria included as Part IV.F.4.f.i concerns the number of overflows per year as discussed in **RESPONSE 109-118** of Section D of the Response to Comments document. The second criteria included as Part IV.F.4.f.ii concerns 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. The third criteria included as Part IV.F.4.f.iii addresses 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 paragraph ii above…" Similarly, EPA's "Guidance for Long Term Control Plans," EPA 832-B-95-002 (August 1995), clarifies that "Eliminate or reduce mass of pollutants [is] equivalent to 85% capture requirement." EPA Guidance on Long Term Control Plan, Section 2.6.1.2. The 85% removal criteria under the Presumption Approach in Part IV.G.4.f.ii applies to the removal of 85% of the volume of combined sewage flow; Part IV.G.4.f.iii requires the removal of the equivalent of amount of mass that would have been associated with the removal of 85% of the volume.

Regarding which parameters the 85% mass removal applies to, the permittee may propose to evaluate one or more parameters in the work plan to demonstrate compliance with this criteria.

No changes have been made to the Final permit(s) as a result of this comment.

130. COMMENT: Can the 85% capture for treatment at the STP be changed based on factors such as the hydraulic capacity of the line going to the STP, the volume of rain, or exceedances of the hydraulic capacity of the STP? [2]

RESPONSE 130: The 85% capture as referenced in Part IV.G.4.f.ii would have to be the design standard if a permittee were to choose to develop their LTCP according to the Presumption Approach. The Department does not have the authority to change this standard under the National CSO Policy. The 85% capture refers to the volume of sewage collected in the CSS. Changes in the hydraulic capacity of the collection system do not reduce the amount of sewage collected. However, a permittee may also choose to develop their LTCP according to the Demonstration Approach, which does not have a designated percent capture specified. Nonetheless, if a permittee chooses to pursue the Demonstration Approach, it would have to propose a CSO control program in order to meet the water quality based and technology based requirements of the CWA, as specified in the National CSO Policy and N.J.A.C. 7:14A-11 Appendix C.

No changes have been made to the Final permit(s) as a result of this comment.

131. COMMENT: Part IV.G.4.f.iii states that the Presumption Approach requirements will be satisfied if "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 in Section G.4.f.ii." Does this mean that less than 85% capture of volume or pollutant mass is acceptable if it can be demonstrated that the mass of pollutants responsible for the impairment are removed? [28] [31]

RESPONSE 131: Criterion iii requires removal of the mass of the pollutants causing water quality impairment that is equivalent to capture of 85% or more of the total flow in the CSS. The commenter's method would be considered under the Demonstration Approach, but would not satisfy the standards for criteria ii and iii of the Presumption Approach.

132. COMMENT: Regarding the phrase "Combined sewer overflow remaining after implementation... specified in Section G.4.f.ii. and iii,...", please change these permit references to G.4.f.i and G.4.f.ii to conform with the National CSO Policy. Part IV.G.4.f.ii refers to "capture of no less than 85% by volume." Part IV.G.4.f.iii refers to "elimination or removal of no less." The National CSO Policy states in II.C.4 "and within the criteria specified at II.C.4.a.i or ii" where II.C.4.a.i is the number of overflows section and II.C.4.a.ii is the capture of 85% by volume section. [20] [29] [32] [40]

133. COMMENT: Regarding the second paragraph Part IV.G.4.f.iii, does this section require that if the Presumption Approach is selected for the 4 to 6 overflows per year, in addition to the NMC installed on those outfalls, that primary clarification and disinfection will be required? [35]

134. COMMENT: Part IV.G.4.f.iii indicates that additional treatment of the residual CSO must still occur even if the Presumption Approach is met, but it is not apparent what the legal basis for this requirement is. Treatment should only be required as specifically necessary to achieve applicable WQS. Likewise, this comment applies with respect to Section G.4.f and G.4.g. [9] [25]

135. COMMENT: Replace "Combined sewer overflows remaining after implementation of the NMCs and within the criteria specified in Section G.4.f.ii and iii, shall …:" with: "Combined sewer overflows remaining after implementation of the NMCs and within the criteria specified in Section G.4.f.i or ii, shall …:" [11] [24]

RESPONSE 132-135: These comments pertain to two typographical errors as made in this section of the Draft permits. Specifically, in accordance with the National CSO Policy and N.J.A.C. 7:14A-11 Appendix C, the reference to G.4.f.ii and iii should have been to G.4.f.i and ii. The word "overflow" was substituted for the word "flows" in the National CSO Policy. Additionally, the Department has revisited Part IV.G.4.f.iii and maintains that the final paragraph could be misinterpreted to be a condition under Part IV.G.4.f.iii which is not the Department's intent. To clarify this, the Department has moved this section under Part IV.G.4.f . Note that the revised text for item " i" is included in **RESPONSE 109-118** and the revised text for item "ii" is included in **RESPONSE 127** in Section C of the Response to

Comments document. The modified version of Part IV.G.4.f is shown below to illustrate the relocated paragraph:

"f. 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 ~~overflow~~ remaining after implementation of the NMCs and within the criteria specified in this section at Section G.4.f.i.~~ii~~. and ii.~~iii.~~ shall receive minimum treatment in accordance with the items below:

- Primary clarification (removal of floatables and settleable solids maybe 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 each of the following below.

i….

ii…

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 in Section G.4.f.ii."

~~Combined sewer overflow remaining after implementation of the NMCs and within the criteria specified in this section at Section G.4.f.i.ii. and ii.iii. shall receive minimum treatment in accordance with the items below:~~

~~- Primary clarification (removal of floatables and settleable solids maybe 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.~~

To clarify further, in accordance with the National CSO Policy, any CSO discharges that receive minimum treatment as defined in that policy will not count towards the total number of events for compliance with the Presumption Approach.

This change affects the second paragraph of Part IV.G.4.f.iii of the Final permits.

136. COMMENT: In the paragraph after Part IV.G.4.f.i it is implied that any and all overflows, regardless of the number that they have been reduced to, must receive primary treatment, solids and floatables disposal, and disinfection. So if you reduce the overflow points so that only four overflows occur at one point (i.e. you seal all other overflows off except one) then this treatment must be added to only one point. Many CSO LTCP storage facilities have a volume equivalent to the runoff from a one or two year design storm event, and those facilities will have overflows during the three, five, 10, and 100 year events. Based upon the Presumption Approach, you will have to build at least one STP, in addition to the storage facilities, that has a 100 year storm hydraulic capacity in order to treat the peak flow from every storm event possible.

Why is it necessary to design STPs for a very rare, 100 year storm peak flow capacity; which is a storm much larger than flows generated during Hurricane Floyd or Irene? So why would any municipality base their CSO abatement design on the presumption criteria when it will produce the largest, most expensive alternatives? Can the permit be written to exclude the overflows resulting from at least some of these extreme precipitation events which occur infrequently? The Demonstration Approach at least offers the opportunity to demonstrate compliance with WQS for facilities that will not be as large as needed in the Presumption Approach. [30]

RESPONSE 136: The commenter is referring to the following paragraph as contained in Part IV.G.4.iii (which has been modified based on the previous response):

"Combined sewer flows ~~overflow~~ remaining after implementation of the NMCs and within the criteria specified in this section at G.4.f.i.~~ii~~. and ii.~~iii~~. 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.

- Disinfection of effluent, if necessary, to meet WQS, protect designated uses and protect human health, including removal of harmful disinfection chemical residuals, where necessary."

This language is verbatim from the National CSO Policy and N.J.A.C. 7:14A-11 Appendix C. The correction of "overflows" to "flows" addresses the commenter's concern and clarifies that remaining overflows after implementation of Part IV.G.4.f.i are required to receive primary treatment, solids and floatables disposal, and disinfection.

To clarify further, in accordance with the National CSO Policy, any CSO discharges that receive minimum treatment as defined in that policy would not be considered will not count towards the total number of events when using the Presumption Approach.

No additional changes have been made to the Final permit(s) as a result of this comment.

137. COMMENT: In the second paragraph of Part IV.G.4.f.iii after "and" and before "within" please include "as part of the LTCP." [35]

RESPONSE 137: The Department does not agree that it is necessary to include the requested language in Part IV.G.4.f.iii, which is incorporated verbatim from the National CSO Policy. This condition is a subsection within the section entitled *Evaluation of Alternatives*. It is therefore understood that the language in this section already pertains to the LTCP.

No changes have been made to the Final permit(s) as a result of this comment.

138. COMMENT: Is Part IV.G.4.g.i, stating that if WQS or designated uses cannot be met as a result of natural background conditions, or pollution sources other than CSOs, then the planned control program does not need to be adequate to meet WQS? Will upstream storm water flows, SSOs, and overland runoff be considered natural background conditions, or pollution sources other than CSOs? As such, would this mean that the CSO pollution control will be considered adequate even if it doesn't meet WQS, and then be subject to retro-fitting if additional controls are subsequently determined to be necessary to meet to meet WQS after the other sources of pollution are eliminated? [12]

139. COMMENT: In Part IV.G.4.g.i it states that if WQS or uses cannot be met as a result of natural background conditions, or pollution control sources other than CSOs, then the planned control program does not need to be adequate to meet WQS? Will upstream sources be considered natural background conditions or pollution sources other than CSOs? [35]

RESPONSE 138-139: Part IV.G.4.g is stated as follows:

"g. The "Demonstration" Approach, in accordance with N.J.A.C. 7:14A-11 Appendix C provides:

A permittee may demonstrate that a selected control program, though not meeting the criteria specified under the Presumption Approach above, is adequate to meet the water quality-based requirements of the CWA.

The permittee must demonstrate each of the following below.

i. The planned control program is adequate to meet WQS and protect designated uses, unless WQS or uses cannot be met as a result of natural background conditions or pollution sources other than CSOs.

ii. The CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment.

iii. The planned control program will provide the maximum pollution reduction benefits reasonably attainable.

iv. The planned control program is designed to allow cost effective expansion or cost effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS or designated uses."

The Department acknowledges that there are other sources of pollution in a water body. Upstream sources of pollution are not considered natural background unless they are, in fact, due to natural causes, such as naturally occurring pathogens levels, BOD levels, and pollutant loads from naturally occurring soil and geologic conditions. Upstream pollution would not qualify as natural background but would count as other pollution sources.

Regardless of the attainment of water quality standards and any receiving water impairments, permittees are required to comply with the more stringent of water quality-based or technology-based requirements. Please refer to **RESPONSE 63** and **RESPONSE 70** in Section A of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of these comments.

140. COMMENT: Part IV.G 4.g.ii suggests that additional CSO control could be required if implementation doesn't produce WQS compliance. However, EPA's National CSO policy recognizes that natural background conditions and pollution sources other than CSOs could be responsible for nonattainment of WQS. This section should include the full text of EPA's National CSO Policy:

"The CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment. Where WQS and designated uses are not met in part because of natural background conditions or pollution sources other than CSOs, a total maximum daily load, including a wasteload allocation, a load allocation or pother means should be used to apportion pollutant loads." [28] [31]

141. COMMENT: In Part IV.G.4.g.ii, the sentence "Where WQS and designated uses are not met in part because of natural background conditions or pollution sources other than CSOs, a total maximum daily load, including a waste load allocation and a load allocation, or other means should be used to apportion pollutant loads" which appears in the National CSO Policy and

state regulations, is missing. When WQS cannot be met because of other pollutant sources, such as natural background or stormwater discharges, it is unfair to have CSO sources as the only source to be remediated. Therefore, please add the sentence above to Paragraph g.ii. [20] [29] [32] [40]

142. COMMENT: When WQS cannot be met because of other pollutant sources, such as natural background or stormwater discharges, it is unfair to have CSO sources as the only source to be remediated. The National CSO Policy recognizes this, and the proposed CSO permit should do so as well by including the sentence "Where WQS and designated uses are not met in part because of natural background conditions or pollution sources other than CSOs, a total maximum daily load, including a wasteload allocation and a load allocation, or other means should be used to apportion pollutant loads." [33] [34]

143. COMMENT: Replace "provide for attainment of water quality standards" with "address water quality-based requirements of the CWA," since CSO controls alone may not result in attainment with WQS. The National CSO Policy in II.C.4.b.ii. states: "Where Water Quality Standards and designated uses are not met in part because of natural background or pollution sources other than CSOs, a total maximum daily load …" The Department is proceeding without any indication of the importance of CSOs in attainment of WQS, and without any assurance that the massive costly effort to reduce CSOs will result in attainment of WQS. [33] [34] [40]

144. COMMENT: Part IV.G.4.g.ii indicates that the CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment. However, the National CSO Policy concludes this paragraph with "Where WQS and designated uses are not met in part because of natural background conditions or pollution sources other than CSOs, a total maximum daily load, including a wasteload allocation and a load allocation, or other means should be used to apportion pollutant loads."

Why was this sentence omitted from the permit? When WQS cannot be met because of other pollutant sources, such as natural background or stormwater discharges, it is unfair to have CSO sources as the only source to be controlled. Therefore, the permittee requests that the sentence above be added to g.ii, consistent with the National CSO Policy. [35] [42] [44]

RESPONSE 140-144: Please refer to **RESPONSE 138-139** of Section D of the Response to Comments document regarding the attainment of WQS and the Demonstration Approach.

The commenters question why the reference to the TMDL that is included in this section of the National CSO Policy was omitted from the permit language. The Department did not include this language in the permit as it is not a permit requirement, rather it is a statement referring to a course of action that may be taken by the Department in situations where there are multiple sources of pollution other than CSOs. The Department has opted not to further delay the LTCPs while waiting for TMDLs to be completed. Further information regarding the NY/NJ Harbor TMDL process is in included in **RESPONSE 63** of Section A of the Response to

Comments document. Further information regarding revisions to WQS is included in **RESPONSE 70** of Section A of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of these comments.

145. COMMENT: Part IV.G.4.g.iii states one of the requirements of the Demonstration Approach to be "The planned control program will provide maximum pollution reduction benefits reasonably attainable." What are the criteria for reasonably attainable? Does the permit condition require that a higher degree of treatment be provided than is necessary to meet water quality objectives and designated uses? [28] [31]

146. COMMENT: Define "reasonable" as used in Part IV.G.4.g.iii. [35]

RESPONSE 145-146: The statement in Part IV.G.4.g.iii states "...maximum pollution benefits reasonably attainable." The term "reasonable" in this context refers to the maximum level of pollution control that is achievable within acceptable costs based on permittee specific conditions. According to EPA, "[t]he term 'reasonably attainable' generally refers to the cost of implementing the planned control program in relation the pollution reduction benefit achieved." EPA Guidance on Long Term Control Plans at Section 3.2.1.1. EPA explains that permittees should use "cost effectiveness as a consideration to help guide consideration of the controls." Id. at Section 3.2. Whether the alternatives considered by the permittee are "reasonably attainable" is determined in large part through development of cost/performance curves required by LTCP#5. Id. at Section 3.3.7.

Permittees should also refer to EPA's "Guidance for Financial Capability Assessment and Schedule Development" (EPA 832-B-97-004, published February 1, 1997) which describes factors that should be considered to evaluate the financial resources a permittee has available to implement CSO controls. Those factors include total annual wastewater and CSO control cost per household as a percent of median household income, bond ratings, overall net debt as a percent of full market property value, unemployment rate, median household income, property tax revenue collection rate, and property tax revenues as a percent of full market property value.

Finally, NJEIT provides funding for wastewater improvements. See http://www.njeit.org/apply.

No changes have been made to the Final permit(s) as a result of these comments.

147. COMMENT: Part IV.G.4.g.iii. First section "iii" should be changed to "ii." [15].

RESPONSE 147: This comment refers to erroneous numbering in the Draft permits for Elizabeth City (NJ0108782), Perth Amboy (NJ0156132) and JMEUC (NJ0024741). However, in Part IV.G.4.g.iii. of MCUA's permit (NJ0020141) "i" should be changed to "ii".

This error has been rectified in Part IV.G.4.g.iii of these Final permits.

148. COMMENT: Regarding Part IV.G.4.g.iv, is this only required for standards in effect now or also for all future changes is WQS or designated uses beyond this permit cycle? [35]

149. COMMENT: LTCPs should allow for cost effective retrofitting if that is going to help them be more flexible and more effective as situations change in the future. [1] [3]

RESPONSE 148-149: The Department agrees that the LTCP must allow for cost effective retrofitting where appropriate as required by Part IV.G.4.g.iv. The Department is required to implement, or require compliance with, the rules and regulations, including the surface water quality criteria at N.J.A.C. 7:9B, that are in effect at the time of permit issuance. Upon each subsequent permit action, such as a modification or a renewal, the Department is required to evaluate if the existing permit conditions are adequate or need to be updated to meet the current regulations, including any new or revised water quality criteria that have been adopted. For example, an LTCP submitted today would only have to evaluate compliance with current surface water quality criteria. However, upon permit renewal, the Department will determine whether or not the permittees will need to update their LTCPs to address the revised criteria at that time.

No changes have been made to the Final permit(s) as a result of these comments.

Part IV, Combined Sewer Management, Section G, LTCP #5, Cost/Performance Considerations

150. COMMENT: Part IV.G.5 addresses cost/performance considerations. The cost information submitted with regards to the LTCP should also include affordability. This is particularly important given the limited resources and income for the service area, and NHSA requests that it be specifically noted in this section. If affordability criteria are met or exceeded, variances to CSO LTCP implementation (in whole or in part) should be granted. *See, e.g.,* 40 C.F.R. § 131.10(g). [25]

RESPONSE 150: Part IV.G.5 establishes that the permittee is required to consider a reasonable range of CSO control alternatives in the preparation of its LTCP that will meet the CWA requirements. See also the EPA's National CSO Policy and N.J.A.C. 7:14A-11, Appendix C – Section II.C.4. Affordability may be addressed in the LTCP. However, the Department does not agree that Part IV.G.5 should be modified to specifically reflect a potential variance to LTCP implementation based on certain affordability criteria.

As stated in the National CSO Policy and N.J.A.C. 7:14A -11, Appendix C - Section IV.B.3., "Implementation of CSO controls may be phased based on the relative importance of and adverse impacts upon WQS and designated uses, as well as the permittee's financial capability and its previous efforts to control CSOs." Additionally, N.J.A.C. 7:14A, Appendix C - Section II.C.8., discusses the LTCP – Implementation Schedule which details a construction and financing schedule for implementation of CSO controls. The Department maintains that this requirement is consistent with the National CSO Policy and the NJPDES Regulations.

Note that during the cost performance analysis, cost is taken into account when choosing the extent of CSO controls for implementation.

Additional guidance is also available through EPA's "Financial Capability Assessment Framework" (FCA Framework) (see http://water.epa.gov/polwaste/npdes/cso/upload/municipal_fca_framework.pdf). The FCA Framework was recently released on November 24, 2014 and identifies the key elements EPA uses in working with permittees to evaluate how their financial capability should influence schedules. In addition, the FCA Framework provides examples of additional information that may help some communities provide a "more accurate and complete picture" of their financial capability as is envisioned in the FCA guidance.

Finally, the commenter's reference to 40 C.F.R. § 131.10(g) is misplaced as that regulation provides the conditions when a state may find that a designated use for a water body is not feasible, and does not provide a variance to LTCP implementation based on affordability.

No changes have been made to the Final permit(s) as a result of this comment.

151. COMMENT: The NHSA services communities that have very limited economic resources and face daunting costs to further limit CSO discharges. [48]

RESPONSE 151: The Department recognizes that communities are facing economic hardships. Cost/performance is a consideration in the selection of proposed control alternatives. Nonetheless, the control of untreated discharges of raw sewage to the waters of the State must be addressed. The Department intends to work with all permittees to provide assistance with the process of compliance with these state and federal regulatory requirements. In addition, where appropriate, compliance schedules for implementation of the LTCP that extend through multiple permit cycles may be considered. Please refer to **RESPONSE 150** above in Section D of the Response to Comments document.

152. COMMENT: PVSC requests that the following phrase be deleted from its individual NJPDES permit:

> "[i]f the permittee chooses to pursue the "Presumption Approach" of 'no more than an average of four discharge events per year', the permittee is not required to conduct this analysis for the other number of events (i.e. 0, 7, 10, 20)."

PVSC does not own and/or operate CSO outfalls, therefore it cannot choose either a Presumption or Demonstration Approach for the municipal permittees. PVSC can only perform a Cost/Performance analysis on increasing the wet weather flow to the STP for both secondary and primary effluent blending. PVSC requests that this section be revised to reflect only PVSC's responsibility under this permit. [42]

153. COMMENT: JMEUC and MCUA do not own or operate a CSS, regulators, or outfalls. Therefore, this section should only be applied to the alternatives evaluated in section G.4. e.iii and vii. [15]

154. COMMENT: The Cost/Performance Consideration section refers to issues related to combined sewer collection systems and CSO discharges and thus are not applicable to the BCUA. This segment of the permit should be eliminated or noted as not applicable to BCUA. [21]

RESPONSE 152-154: The Department maintains that it is appropriate to include all of the LTCP requirements in all of the Final CSO NJPDES permits, whether the permittee owns and/or operates any CSO outfalls, or if they only own and/or operate the STP that receives flows from a CSS. The Department's regulations at N.J.A.C. 7:14A-22.1(b), the National CSO Policy, and the 1989 CSO Strategy all emphasize the necessity and responsibility of the STP to assume an integral role in development of LTCPs, whether or not it owns or operates a CSO outfall. The CSO Strategy states that, when different parts of a single CSS are owned and operated by more than one authority, "permits issued to such authorities should require joint preparation and implementation of the requirements of this strategy," including identification and monitoring of CSOs within the CSS, "and specifically define the responsibilities and duties of each owner and operator." 54 Fed. Reg. 37372.

Planning and implementation of the LTCP elements cannot be done by piecemeal. Without the cooperation of the STP, the fragmentary efforts of the CSO owners cannot be expected to account for the cumulative cause and effect of CSO events throughout the CSS. 59 Fed. Reg. 18691-92. The Department has addressed this issue by including Part IV.G.10 to clarify the responsibilities of the entities in the hydraulically connected system as described in **RESPONSE 10-13** of Section D of the Response to Comments document.

No changes have been made to the Final permit(s) as a result of these comments.

155. COMMENT: The Cost/Performance Consideration section requires the submission of a report to assess the scope of CSO LTCP measures to be implemented. The submission of a joint report would seem to be appropriate so an integrated solution can be addressed. [9]

RESPONSE 155: The Department agrees and acknowledges the commenter's support. Again, as described in the Fact Sheet as well as in Part IV.D.3.a, the Department encourages municipalities and STPs to jointly prepare and submit a single LTCP for the entire hydraulically connected system serves to foster an integrated solution.

No changes have been made to the Final permit(s) as a result of this comment.

Part IV, Combined Sewer Management, Section G, LTCP #6, Operational Plan

156. COMMENT: PVSC requests that "CSO control facilities" and "maintaining Green Infrastructure" be deleted from its Individual NJPDES Permit. PVSC does not own and/or operate the CSOs, nor does it own property in CSSs for the construction or implementation of GI. [42]

157. COMMENT: Delete "maintaining Green Infrastructure" as such an alternative is not required for all LTCPs. [9] [25]

RESPONSE 156-157: The Department maintains that it is not necessary to tailor Part IV.G.6.a to the specific circumstances raised in these comments. Rather, the Department has included this same LTCP requirement in all of the Final CSO NJPDES permits. The key element for compliance with this requirement is joint participation by all hydraulically connected permittees to develop a plan that satisfies all of the LTCP elements for their CSS. In fact, the Department has determined that a reference to the new provision set forth in Part IV.G.10 is appropriate to clarify the permittees' respective obligations as part of the LTCP, and has revised Part IV.G.6.a as follows:

"a. Upon Departmental approval of the final LTCP and throughout implementation of the approved LTCP as appropriate, the permittee shall modify the O&M Program and Manual, in accordance with D.3.a and G.10, to address the final LTCP CSO control facilities and operating strategies, including but not limited to, maintaining Green Infrastructure, staffing and budgeting, inflow/infiltration, and emergency plans."

Regarding the reference to maintaining GI, the Department maintains that it is premature to make this determination prior to submission of the *Evaluation of Alternatives* as per Part IV.G.4.

The Department has addressed the issue of cooperation by including Part IV.G.10 to clarify the responsibilities of the entities in the hydraulically connected system as described in **RESPONSE 10-13** of Section D of the Response to Comments document.

This change affects Part IV.G.6.a of the Final NJPDES CSO permits.

Part IV, Combined Sewer Management, Section G, LTCP #7, Maximizing Treatment at the Existing STP

158. COMMENT: Elizabeth City and Perth Amboy do not own or operate an STP; therefore, delete this section in its entirety. [15]

RESPONSE 158: The Department has included the same LTCP requirements in all of the Final CSO NJPDES permits. While the analysis required under LTCP #7 cannot be conducted by the municipalities, the permittees who do not own/operate STPs are required to include this information in their LTCP. The key element for compliance with this requirement is joint participation by all permittees to develop a plan that satisfies all of the LTCP elements for their CSS. This may be accomplished through the submission of a single LTCP for the CSS (the Department's preference), or through submission of individual LTCPs by each member of the CSS so long as all of the individual LTCPs reflect a coordinated approach that will ensure compliance with all of the LTCP elements for the CSS. Please refer to Part IV.G.10 of the permit.

159. COMMENT: Section G.7 requires "the maximization of the removal of pollutants during and after each precipitation event at the STP, ensuring… treatment to the greatest extent practicable...while still meeting all permit limits." This provision is not reflected in federal or state law and establishes a performance standard beyond the applicable permit limits. The applicable requirement is to maximize CSO flows to the facility, not to ensure maximum treatment of those flows once it has reached the facility. This provision should be deleted or reworded. [9] [25]

RESPONSE 159: The Department maintains that this provision is consistent with federal and state law. LTCP #7 in the National CSO Policy and in N.J.A.C. 7:14A-11 Appendix C, *Maximizing Treatment at the Existing POTW Treatment Plant*, clearly requires that treatment be maximized, not merely "to maximize CSO flows to the facility" as stated by the commenter. *Maximization of flow to the POTW for treatment* is NMC #4, not an LTCP requirement. LTCP #7 anticipates upgrades and improvements to the STP that would not be required under NMC #4. Additionally, LTCP #7 requires a condition on the level of treatment for that flow that must be achieved by the STPs in that the effluent must still meet all effluent limits.

The Department also disagrees with the commenter that this requirement "establishes a performance standard beyond the applicable permit limits" since the performance standard as stated in the permit is specifically to meet the established permit limits, and does not require any additional performance standard.

However, the Department has determined that a reference to the new provision set forth in Part IV.G.10 is appropriate to clarify the permittees' respective obligations as part of the LTCP. As a result, Part IV.G.7.a is revised as follows:

"a. The LTCP shall include the maximization of the removal of pollutants during and after each precipitation event at the STP, in accordance with D.3.a and G.10, ensuring that such flows receive treatment to the greatest extent practicable utilizing existing tankage for storage, while still meeting all permit limits."

This change affects Part IV.G.7.a of the Final permits.

160. COMMENT: The Draft permit states that the PVSC shall maximize flows to the "greatest extent practicable...while still meeting all permit limits." PVSC requests that the annual average flow limitation be removed from its Individual NJPDES permit. As stated in previous comments, in reviewing NJPDES permits for other STPs in the State of New Jersey, PVSC has not found another NJPDES permit with an annual average flow limitation, including, but not limited to, the NJPDES permits of the largest POTWs in the State (BCUA, MCUA, JMEUC and CCMUA). An annual average flow limitation is contrary to this requirement. [42]

RESPONSE 160: The annual average flow limitation in the PVSC permit has been carried over through many permit cycles; this is not a new requirement. Please refer to **RESPONSE 2** in the Response to Comments document for Category A of the PVSC Individual NJPDES Permit NJ0021016. Note that the Sanitary Wastewater Response to Comments document is

included in the PVSC permit and is separate from this Category CSM Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

161. COMMENT: PVSC also requests that the Department grant a waiver of the 85% removal requirements for TSS and $CBOD_5$ by either removing the monthly average limitation or providing a less stringent limitation, in accordance with N.J.A.C. 7:14A-12.3(b) and (c). Removal of this requirement would allow PVSC to maximize flows to the STP and maintain compliance with all permit limits. [42]

RESPONSE 161: The Department has received PVSC's revised request for the 85% removal requirements. The Department may propose a major modification to this permit in the future. Please refer to **RESPONSE 3** in the Response to Comments document for Category A of the PVSC Individual NJPDES Permit NJ0021016. Note that the Sanitary Wastewater Response to Comments document is included in the PVSC permit and is separate from this Category CSM Response to Comments document.

No changes have been made to the Final permit(s) as a result of this comment.

Part IV, Combined Sewer Management, Section G, LTCP #8, Implementation Schedule

162. COMMENT: Regarding Part IV.G.8.a, between the phrase, "water quality standards," and "including those", the permit omits the phrase "and designated uses" that appears in the National CSO Policy." Why was this phrase omitted? We recommend that this phrase be included in this section. [20] [32] [35] [40] [42] [44]

RESPONSE 162: This phrase "designated uses" was omitted from this requirement in error. In addition, a reference to the new provision set forth in Part IV.G.10 is appropriate to clarify the permittees' respective obligations as part of the LTCP. This has been corrected in all the Final NJPDES CSO permits, and Part IV.G.8.is revised as follows:

"a. The permittee shall submit a construction and financing schedule in accordance with D.3.a and G.10., for implementation of Department approved LTCP CSO controls. Such schedules may be phased based on the relative importance of adverse impacts upon water quality standards and designated uses, the permittee's financial capability, and other water quality related infrastructure improvements, including those related to stormwater improvements that would be connected to CSO control measures."

This change affects Part IV.G.8.a of the Final NJPDES CSO permits.

163. COMMENT: In Part IV.G.8.a, this condition contains the phrase "that would be connected to CSO measures." What is meant by this phrase? Does it refer to costs allowed under the Integrated Planning Approach? [20] [32] [35] [40] [42] [44]

RESPONSE 163: In this condition, the phrase "that would be connected to CSO measures" refers only to those water quality improvements that result from a CSO control measure. For example, under Integrated Planning, if a section of combined sewer is separated into a sanitary sewer and a storm sewer, any work to separate the stormwater sewer is considered an improvement and should be part of the construction and financing schedule in the LTCP. Additionally, a project to expand or repair a stormwater sewer within a separately sewered section of a community may also be considered in the construction and financing schedule in the LTCP.

No changes have been made to the Final permit(s) as a result of this comment.

164. COMMENT: Due to the complexity and size of the sewer system, compliance with these permit requirements will be a massive undertaking. What does the State expect, in terms of years, as an overall compliance schedule? The cost of compliance will also be astronomical, presumably beyond anything Elizabeth City can afford. What costs, in terms of yearly dollars expended, does the State expect Elizabeth City to bear in an effort to meet its compliance schedule? [12]

165. COMMENT: Will there be guidance for the permittees as to how long the control plans will take to meet WQS? If 25 to 30 years is the standard, as one commenter has contended, permittees would like to know what to expect to have a ballpark idea. While it may be difficult to estimate on a case-by-case situation, it would be good to have an idea of how long we can expect these plans to be in operation before we achieve WQS. [13]

RESPONSE 164-165: The National CSO Policy anticipates phased implementation of CSO controls where the NMCs are completed before the LTCP, and where controls selected during LTCP steps 4 and 5 are prioritized for implementation based on the relative importance of the adverse impacts upon water quality and the permittee's financial capability and available funding resources. The projected costs of LTCP controls will be estimated in LTCP steps 4 and 5 with other permittees in the hydraulically connected system. Once these costs are determined, the length of time to implement the approved controls can then be calculated based on factors described in Section IV.G.8.c of the permits, including prioritization of controls to protect sensitive areas, the annual financial capability of each of the permittees, grant and loan availability, previous and current sewer use fees and rates, and other viable funding mechanisms. The factors used to determine financial capability are detailed in Section G.8.c.iv. Given the fact that the NJPDES CSO permits cover a range of CSO communities with widely varying CSO control requirements and priorities, and that LTCPs are not yet developed or approved, the time needed to reach full CSO control will vary between hydraulically connected systems, and it is premature to estimate how long compliance with the requirements of the CWA may take. However, extended schedules covering multiple permit cycles are expected for large or complex systems. Please refer to the Fact Sheet for related guidance documents, specifically "Combined Sewer Overflows – Guidance for Financial Capability Assessment (EPA 832-B-95-006)."

No changes have been made to the Final permit(s) as a result of these comments.

166. COMMENT: Newark cannot determine the overall cost of its financial ability until the costs to Newark from any plan selected by PVSC is determined. [35]

RESPONSE 166: As stated previously, the STP and other entities within each hydraulically connected system are required to work together to develop individual but coordinated LTCPs, or (the Department's recommendation) to provide a single, jointly-prepared LTCP. As such, the CSO Implementation Schedule in each LTCP will define the specific responsibilities of the other CSO permittees, including their respective funding obligations, to satisfy the overall goals of the LTCPs to address CSO impacts throughout the hydraulically connected system.

For Newark, the STP (PVSC), the general public (through the *Public Participation Process*, LTCP #2), and each of the combined sewer communities (including Newark) will have a say in the alternatives, timeline and cost, although the Department will have review authority over the LTCP. Thus, the affected entities (including Newark) have a role in proposing and evaluating control alternatives, including cost estimates, will have a say in choosing among the alternatives, and will coordinate with PVSC to define their responsibilities in order to prepare an implementation timeline to satisfy Section IV.G.8. Please refer to **RESPONSE 10-13** of Section D of the Response to Comments document for additional information.

No changes have been made to the Final permit(s) as a result of this comment.

167. COMMENT: Part IV.G.8.a limits the LTCP schedule for consideration only to projects and activities related to the CSO control measures. Integrated planning allows for a broader consideration of municipal expenditures under a range of federal and state programs (e.g., other infrastructure improvements related to water and sewer activities). The scope of activities that may be considered in setting an appropriate schedule should be increased to accommodate these other areas of municipal expenditure, which affects the ability to obtain municipal financing for such bond improvements. [9] [25]

168. COMMENT: Part IV.G.8.a states that the permittee will submit an implementation schedule to the Department for review and approval. Will the Department include EPA's Developing Integrated Municipal Stormwater and Wastewater Planning Approach Framework dated May 2012 in their review and approval process? [28] [31]

RESPONSE 167-168: EPA's Integrated Planning framework was published in May 2012 and is available from EPA's website for integrated planning at http://water.epa.gov/polwaste/npdes/stormwater/Integrated-Municipal-Stormwater-and-Wastewater-Plans.cfm. As described by EPA:

> "An integrated planning process has the potential to identify a prioritized critical path to achieving the water quality objectives of the CWA by identifying efficiencies in implementing competing requirements that arise from separate wastewater and stormwater projects, including capital investments and operation and maintenance requirements. The CWA and implementing regulations, policy and guidance provide the necessary flexibility to implement an integrated planning process.

The integrated planning approach is not about lowering existing regulatory or permitting standards or delaying necessary improvements. Rather, it is intended to be an option provided to help municipalities meet their CWA obligations by optimizing the benefits of their infrastructure improvement investments through the appropriate sequencing of work."

While the Department encourages the use of integrated planning, an integrated planning approach is not being mandated as a NJPDES CSO permit requirement. However, the Department understands that integrated planning can lead to more cost-efficient, sustainable and comprehensive solutions that can improve water quality and can support other quality of life attributes that enhance the vitality of communities while lowering the overall costs of compliance with the National CSO Policy and other CWA regulatory requirements. Communities and Sewage Authorities may choose to incorporate integrated planning in order to realize these benefits. The Department is willing to review any LTCP which may be considered as part of an integrated planning approach so long as all the LTCP requirements of the NJPDES CSO permit are addressed.

No changes have been made to the Final permit(s) as a result of these comments.

169. COMMENT: Delete Part IV.G.8.c.i in its entirety. This section does not appear in the National CSO Policy or state regulations. Overflows that don't reach waters of the United States are not the proper subject of a NJPDES permit. [20] [29] [32] [35] [40] [42] [44]

RESPONSE 169: The Department does not agree that it is appropriate to delete Part IV.G.8.c.i. Please refer to **RESPONSE 70** of Section C of the Response to Comments document. While the requirement in Part IV.G.8.c.i does not appear in the National CSO Policy, it does appear in the NMCs. Specifically, EPA guidance for NMC #2 entitled *Maximization of Storage in the Collection System* states that permittees should ensure that modifications to the CSS will not cause other problems, such as street or basement flooding.

No changes have been made to the Final permit(s) as a result of this comment.

170. COMMENT: In addition to the inclusion of the property tax collection rate as a factor in Part IV.G.8.c.vi, the sewer charge collection rate should also be included as a factor. [35]

RESPONSE 170: Regarding Part IV.G.8.c.iv, the permittee is free to propose other significant, relevant criteria for determining financial capability under Section G.8.C.iv. Factors listed in this section are not all inclusive, and should be considered at a minimum; however, the Department encourages additional factors to be considered, as necessary. To clarify the Department's intent on this issue, this requirement has been changed in the Final permit to allow additional significant, relevant factors to be considered. The revised requirement now reads:

"iv. The permittee's financial capability including, but not limited to, consideration of the ~~such~~ factors ~~as~~ below:

- Median household income.
- Total annual wastewater and CSO control costs per household as a percent of median household income.
- Overall net debt as a percent of full market property value.
- Property tax revenues as a percent of full market property value.
- Property tax collection rate.
- Unemployment.
- Bond rating."

This change affects Part IV.G.8.c.iv of the Final NJPDES CSO permits.

171. COMMENT: Part IV.G.8.c.viii refers to an "…overall Asset Management Plan." What is the definition of an overall Asset Management Plan? Will "other water related infrastructure improvements" need to be in an Asset Management Plan in order to be included in an Integrated Planning Approach? [20] [29] [32] [35] [40] [42] [44]

RESPONSE 171: The Asset Management Plan requirements are described in Part IV.G.1.j.

For the purposes of Part IV.G.8.c.viii, the term "overall Asset Management Plan" refers to the Asset Management Plan for the hydraulically connected system covered under this permit. That is, this term refers to the entire system regulated under this permit including any separate or combined collection systems, STP, outfalls and other related parts. Part IV.G.8.c.viii was not intended to require permittees to create coordinated Asset Management Plans for all the programs covered under Integrated Planning, such as the CWA. That being said, the Department recognizes that use of the term "overall" can be confusing and has removed this word in each of the NJPDES CSO Final permits. Part IV.G.8.c.viii is revised as follows:

"c. In accordance with Section D.3.a.iv., the permittee shall submit an implementation schedule, including yearly milestones, which considers the below...

viii. Resources necessary to design, construct and/or implement other water related infrastructure improvements as part of an ~~overall~~ Asset Management Plan as per Part IV.F.1."

This change affects Part IV.G.8.c.viii of the Final NJPDES CSO permits.

172. COMMENT: Do water related infrastructure improvements as referenced in Part IV.G.8.c.viii include those to the potable water system? [35]

RESPONSE 172: Under earlier EPA guidance, integrated planning for water related infrastructure improvements (See "Integrated Municipal and Wastewater Planning Approach Framework", May 2012) referred only to the requirements under the CWA, such as stormwater permits, these NJPDES CSO permits and the NJPDES DSW permits for the STP. Potable water system requirements fall under the Safe Drinking Water Act (SDWA) and therefore were not part of the integrated planning process. However, the EPA has recently issued a revised framework. The "Financial Capability Assessment Framework", November 24, 2014, which

states that existing general obligation debt associated with the SDWA would be considered and information regarding future drinking water obligations may be submitted for consideration in analyzing financial capability. The Department realizes that STPs and municipalities face many financial challenges and their planning should factor in those challenges from both requirements under the CWA and SDWA.

No changes have been made to the Final permit(s) as a result of this comment.

173. COMMENT: Regarding Part IV.G.8.a, PVSC requests that "CSO controls" and "including those related stormwater improvements that would be connected to CSO control measures" be deleted from its Individual NJPDES Permit. PVSC does not own and/or operate CSO outfalls. [42]

174. COMMENT: Regarding Part IV.G.8.c, PVSC requests that Items i., ii. and iii.be deleted from its Individual NJPDES Permit. PVSC does not own and/or operate CSO outfalls. [42]

175. COMMENT: Regarding Part IV.G.8.c,. as JMEUC does not own /operate CSO outfalls, paragraphs c. ii. and iii. do not apply. [9]

176. COMMENT: Regarding Part IV.G.8.c, the permittee does not own a CSS, regulators, or outfalls. Therefore, Part IV.G.8.c should only be applied to the alternatives in section G.4.e.iii and vii selected for implementation [15]

RESPONSE 173-176: As discussed more fully in **RESPONSE 26-42** in Section A of the Response to Comments document, the National CSO Policy and the Department's regulations emphasize the necessity and responsibility of the STP to assume an integral role in development of the LTCP. Planning and implementation of the LTCP elements and the NMCs cannot be done piecemeal where each permittee is only responsible for the portion of the system that the permittee owns, as the commenters imply. Without coordination lead by the STP and the cooperation of all CSO permittees, the fragmentary efforts of the CSO owners cannot be expected to account for the cumulative cause and effect of CSO events. See **RESPONSE 10-13** of Section D of the Response to Comments document regarding the new provision set forth in Part IV.G.10 for all NJPDES CSO permits.

In order to ensure that each of the CSO permittees completes an LTCP, all NJPDES CSO permittees in one hydraulically connected system are required to submit a full LTCP which contains all of the information required under each of the nine elements of the LTCP. The LTCP may identify specific responsibilities for each municipality and STP. These requirements have been included in all of the NJPDES CSO permittee permits, whether the permittee currently owns and/or operates any CSO outfalls, or only owns and/or operates the STP that receives flows from a CSS. The Department has issued the individual permits to require STPs, including those who do not own or operate CSO outfalls, to cooperate with CSO owners and operators and include the information provided by the permittees that do own and operate that portion of the CSS in their LTCP submission materials.

No changes have been made to the Final permit(s) as a result of these comments.

Part IV, Combined Sewer Management, Section G, LTCP #9, Compliance Monitoring Program

177. COMMENT: Section G.9.a is a requirement regarding the verification of the baseline and existing conditions for compliance with WQS and protection of designated uses. Previous permits required a baseline monitoring report for the sewer system and the CSO points, but not the water quality condition of the waterbodies into which the CSOs discharge. This effort, which includes ambient sampling and modeling to determine compliance with WQS and designated uses, was not included in any previous permitting work. Some of the required work may have been carried out by other federal and state programs, but little work was performed in the small tributaries into which the CSO outfalls discharge. [15] [29]

RESPONSE 177: Part IV.G.9.a concerns the Compliance Monitoring Program required by the National CSO Policy. Some monitoring was required under the MGP (Final CSS, NJ0105023 issued June 30, 2004) and additional monitoring is required in this NJPDES CSO permit action. The CMP requires collection of baseline monitoring information for comparison with subsequent CMP sampling events during and after LTCP implementation in order to evaluate the effectiveness of implemented CSO controls. The CMP will verify compliance with WQS and protection of designated uses. The Department recognizes that this CMP requirement is more extensive than previous requirements. However, the permittee may use previous studies as well as existing data collected under the Department approved QAPP to the extent that they are accurate and representative of a properly operated and maintained sewer system. Permittees may refer to the guidance document entitled *Receiving Waters Monitoring Work Plan Guidance for the CSO Program*,which is available at www.state.nj.us/dep/dwq. Where this information does not already exist, permittees will need to conduct new sampling and analysis to establish baseline conditions.

No changes have been made to the Final permit(s) as a result of this comment.

178. COMMENT: Regarding Section G.9.a, delete the word “during” in Line 3. The intent of the CMP is to monitor the effects of the selected CSO Controls on compliance with WQS. The monitoring should take place before (baseline) and after the implementation of controls. What is the purpose of intense monitoring activity between the baseline and the time when controls are in place? What new information will be forthcoming during this period? [20] [29] [32] [35] [40] [42] [44]

179. COMMENT: Regarding Section G.9.a, delete the word “during” in Line 3, and also from Line 2 of the previous paragraph. The intent of the CMP is to monitor the effectiveness of the selected CSO controls. Accordingly, the National CSO Policy requires baseline and post-construction compliance monitoring. Consistent with the National CSO Policy, monitoring should take place before (baseline) and after (post-construction) the implementation of the selected CSO controls. [33] [34]

RESPONSE 178-179: Part IV.G.9.a has been revised in format where this condition now extends into Part IV.G.9.b. Part IV.G.9.a and Part IV.G.9.b, in part, is stated as follows:

"9. Compliance Monitoring Program (CMP)

a. The monitoring information collected from the ambient baseline monitoring phase of the CMP, in accordance with D.3.a., will be compared to subsequent CMP events during and after LTCP implementation to evaluate the effectiveness of implemented CSO controls.

b~~a~~. The permittee shall implement a CMP adequate to: verify baseline and existing conditions, the effectiveness of CSO controls, compliance with water quality standards, and protection of designated uses. This CMP shall be conducted before, during and after implementation of the LTCP and shall include a work plan to be approved by the Department that details the monitoring protocols to be followed…"

The Department maintains that inclusion of the word "during" in Part IV.G.9.a is appropriate. Trend analyses are helpful in understanding the changes in receiving water quality and can provide important feedback to assess the success of CSO controls prior to the completion of the LTCP. Because CSO controls are expected to be implemented in phases and full compliance with the approved LTCP may extend over multiple permit cycles, the LTCP needs to conduct interim monitoring to evaluate the effectiveness of controls as they are phased in. Long-term data can be used to demonstrate the influence of control plan activities on water quality. This permit condition is consistent with EPA's "Guidance for Long Term Control Plans," EPA 832-B-95-002 (August 1995), at Section 4.6, which states that "[t]he municipality should conduct a monitoring program during and after LTCP implementation to help determine the effectiveness of the overall program in meeting CWA requirements and achieving local water quality goals."

Please note that the Department does not envision monitoring any more frequently than once per permit cycle or following the implementation of significant CSO control measures, whichever is more frequent.

This change affects Part IV.G.9.a and Part IV.G.9.b of the Final permits.

180. COMMENT: Section G.9 states that the "… ambient baseline monitoring phase of the CMP, in accordance with D.3.a, will be compared to subsequent CMP events…" Because Section D.3.a discusses the Regional LTCP, it is anticipated that the referenced section should be Section D.3.d. [19] [26]

181. COMMENT: Section G.9 makes reference to Section D.3.a which concerns the Regional LTCP. It is anticipated that the referenced section should be Section D.3.d. [25]

RESPONSE 180-181: The reference to D.3.a is correct. Part IV.D.3.a states, in part, "The Department encourages a single LTCP to be developed and submitted on behalf of all of the permittees in a hydraulically connected sewer system…" The intention of this reference is to

promote a single LTCP for hydraulically connected permittees for the purposes of Part IV.G.9.a.

No changes have been made to the Final permit(s) as a result of these comments.

182. COMMENT: Regarding Section G.9.a.i, it is not possible to comment on guidance that does not yet exist. If the Department is going to require the permittee to perform ambient monitoring in accordance with specific guidance, the permittee requests the opportunity to review and comment on the guidance. Therefore, either eliminate this paragraph, or re-propose along with the guidance in order to provide the opportunity for review and comment. [33] [34] [40]

183. COMMENT: The Department has not yet adopted a guidance document for ambient in-stream monitoring. Without such a critical document available for review, the comment period should be extended until at least 30 days following the issuance of the guidance document. [15] [20] [29]

184. COMMENT: The guidance document name and location are not provided. Please provide information on the guidance document so that the in-stream monitoring requirements can be evaluated. [12]

RESPONSE 182-184: The commenters are correct that the Draft NJPDES CSO permits, Part IV.G.9.a.i, referred to a guidance document and website link that was "To Be Determined." The Division of Water Quality has completed a guidance document entitled *Receiving Waters Monitoring Work Plan Guidance for the CSO Program*, which is available at www.state.nj.us/dep/dwq. This guidance document provides a framework for sampling plans to satisfy ambient monitoring requirements as required by NJPDES CSO permits. Specifically, this guidance provides permittees with an outline of the necessary receiving water monitoring elements and also provides links to EPA's CSO documents on such monitoring. This guidance document has been created and is a tool that will assist the permittees in developing the ambient instream monitoring work plan. Please see **RESPONSE 3-8** in Section D of the Response to Comments document for additional information regarding use of this guidance document.

The Department shared and received comments on the Draft guidance document with NJPDES CSO permittees . Release of this document is concurrent with the finalization and issuance of the NJPDES CSO permits, and is available at http://www.state.nj.us/dep/dwq/cso.htm. Part IV.G.9.b.i (formerly Part IV.G.9.a.i in the Draft permits) has been revised in the Final permits as follows:

"i. Ambient in-stream monitoring may be performed in accordance with the guidance document entitled: "Receiving Waters Monitoring Work Plan Guidance for the CSO Program" at www.state.nj.us/dep/dwq ~~*[Document Name]* at *[website link] - To Be Determined*~~."

This change affects Part IV.G.9.b.i of the Final permits.

185. COMMENT: Regarding Section G.9.a, is it the intent of the Department to have the permittee conduct CSS modeling to develop the information, or is it the intent of the Department to have the permittee conduct equipment and real time measurements and sampling? Would the real time monitoring be conducted at the regulator? Would it be visual inspection or metering? Many of the outfalls have storm water connections in the downstream outfall pipe so how will this be addressed? [12]

186. COMMENT: Please confirm that modeling may be used to satisfy the requirements of Section G.9.a. [35]

RESPONSE 185-186: For the initial round of baseline monitoring and modeling, permittees were required to submit portions of this monitoring under the MGP. Permittees can evaluate what was submitted and revise, as necessary, in order to meet the requirements of this permit. Appropriate Department-approved and verified models may be used for system characterization for sewage infrastructure characterization and for modeling duration and volume of discharges. Modeling is not appropriate for ambient in-stream monitoring as required under Part IV.G.9. However, the Department encourages the use of previously collected data under a Department approved QAPP.

For monitoring during and after implementation of the LTCP, the permittee should conduct physical sampling and measurements to verify the accuracy of the model predictions for their circumstances. Representative CSO outfalls may be selected rather than sampling all outfalls in the hydraulically connected system and must be approved as part of the work plan.

No changes have been made to the Final permit(s) as a result of these comments.

187. COMMENT: A less than 15 month time period, depending on approval of the work plan, may not be enough time to complete this part of the work. The ambient and benthic sampling can only be done at certain times of the year to capture the entire life cycle of the organisms. Also, because a single year sampling program should not be expected to provide the information needed to determine a truly representative ambient and benthic baseline, the ambient sampling program should be repeated for a second year where needed. Therefore, delete “EDP +12 months” and replace it with “EDP +30 months.” Subsequent phases of the LTCP, such as deciding between Presumption and Demonstration Approaches, and determining levels of CSO control that is needed, also depend on the results of the CMP. [15] [29]

RESPONSE 187: The Draft permits specified that the CMP Work Plan is due on or before EDP +3 months. While the Department intends to expedite approval of these work plans, the Department has determined that additional time is needed to ensure a meaningful process. As described in **RESPONSE 178-184** and **RESPONSE 190-197** in Section B of the Response to Comments document, the Department has revised Part IV.D.3.c as follows:

"c. In accordance with Section G.9., the permittee shall submit an approvable baseline Compliance Monitoring Program (CMP) W~~w~~ork P~~p~~lan: within 6 months from the effective date of the permit (EDP) ~~on or before EDP + 3 months~~."

For those permittees who will be submitting separate LTCPs, Part IV.D.3.d has been modified in the Final permits as follows:

"d. Unless otherwise specified by the Department in ~~In~~ accordance with Section G.9. and the approved work plan, the permittee shall submit an approvable baseline CMP Report and data: within 24 months from the effective date of the permit (EDP) ~~on or before EDP + 12 months~~."

For those permittees who will be submitting single, coordinated LTCPs, Part IV.D.3.d has been modified in the Final permits as follows:

"d. Unless otherwise specified by the Department in ~~In~~ accordance with Section G.9. and the approved work plan, the permittee shall submit an approvable baseline CMP Report and data: within 36 months from the effective date of the permit (EDP) ~~on or before EDP + 12 months~~."

The baseline CMP Report and data is intended to establish the conditions over time to document a trend based on the implementation of CSO controls. While the Department is requiring ambient data for pathogens as a minimum, the Department is not mandating benthic data as described in this comment. The reduction in volume of combined sewage will directly relate to a reduction of pollutants and toxics. Pathogens are intended to serve as an indicator parameter. Please refer to the guidance document entitled *Receiving Waters Monitoring Work Plan Guidance for the CSO Program* at www.state.nj.us/dep/dwq for additional information. Also, the permittee may use previous studies for the baseline CMP Report to the extent that they are accurate and representative. Approval for the use of existing data shall be requested as part of the work plan.

While Part IV.D.3.c and Part IV.D.3.d have been modified as described previously, no additional changes have been made to the Final permit(s) as a result of these comments.

188. COMMENT: The CMP Work Plan should include requirements for better and more specific monitoring plans. Specifically, the National CSO Policy states:

"The permittee should develop a comprehensive, representative monitoring program that measures the frequency, duration, flow rate, volume and pollutant concentration of CSO discharges and assesses the impact of the CSOs on the receiving waters. The monitoring program should include necessary CSO effluent and ambient in-stream monitoring and, where appropriate, other monitoring protocols such as biological assessment, toxicity testing and sediment sampling. Monitoring parameters should include, for example, oxygen demanding pollutants, nutrients, toxic pollutants, sediment contaminants, pathogens, bacteriological indicators (e.g., Enterococcus, E. Coli), and toxicity."

The Department should ensure that the plans allow for cost-effective retrofitting so that the plans can be adapted as efficiently as possible to changing or unforeseen circumstances. [3]

189. COMMENT: The monitoring program should address the specific water quality problems in the receiving waters impacted by the permittee's CSOs. This may require monitoring for parameters in addition to pathogens. For example, some waterbodies may be impacted by nutrients, toxics or other pollutants of concern. This is especially critical for those permittees choosing to follow the "Demonstration Approach" when developing the CSO LTCP. [5] [11] [24]

190. COMMENT: There should be more specificity in the NJPDES permits with respect to what the individual outfalls need to monitor**.** [1]

RESPONSE 188-190: The objective of the monitoring effort is to establish baseline water quality conditions of the CSO receiving water body, and not to conduct a thorough impact assessment of every known parameter found in a typical wastewater and/or stormwater. Which parameters should be monitored will depend upon the CSO and the parameters in the waste stream, the receiving water body, designated uses and water quality impairments, but must include pathogens at a minimum. Please refer to Section 4.2.2.4 of EPA's CSO Post Construction Compliance Monitoring Guidance (available at http://water.epa.gov/polwaste/npdes/cso/EPA-Issues-Post-Construction-Compliance-Monitoring-Guidance.cfm) for a list of parameters that should be considered for inclusion in the CMP. The list is not all inclusive: as part of the CMP development and approval process, permittees should consult with the Department to determine whether any additional parameters or field monitoring should be selected for compliance monitoring.

When deciding on which indicator to use in establishing a baseline, there are several factors that need to be taken into consideration: the selected indicator should be implementable, result in quantifiable measures relating to the impact of CSO on the receiving waters all while reducing analytical interferences and data uncertainty. Please refer to **RESPONSE 23-26** in Section D of the Response to Comments document.

Questions or issues that arise with respect to specific outfalls are best addressed as part of the work plan submission to be made to the Department for review and approval.

No changes have been made to the Final permit(s) as a result of these comments.

191. COMMENT: Section G.9 addresses compliance monitoring regarding the effectiveness of CSO control measures. The degree of compliance monitoring must be related to the rationale used to approve the LTCP (i.e., if an 85% reduction is the basis for the degree of individual CSO controls, monitoring measures would change significantly). This provision should be revised to reflect that fact. [25]

RESPONSE 191: The Department agrees that the frequency of compliance monitoring may be related to the approach selected (i.e. Presumption or Demonstration) and implementation schedule in the approved LTCP. The CMP provisions include monitoring criteria required by

the National CSO Policy at Part II.C.1.c and adopted by the Department to verify baseline waterway and CSO conditions and to assess the effectiveness of CSO controls during and after LTCP implementation. Permittees are directed to submit a CMP Work Plan on or before EDP +6 months in which they may propose a monitoring schedule for the Department's consideration based on site-specific needs.

No changes have been made to the Final permit(s) as a result of this comment.

192. COMMENT: Section G.9 appears to be in conflict with Part IV.F.9 entitled "Monitoring to effectively characterize CSO Impacts and the efficacy of CSO controls." That section states "Since the Permittee does not own /or operate any CSO outfalls, there is no monitoring to characterize CSO impacts and controls at this time." [15]

193. COMMENT: Section G.9 refers to issues related to combined sewer collection systems, and CSO discharges and thus are not applicable to the BCUA. This segment of the permit should be eliminated or noted as not applicable to BCUA. [21]

194. COMMENT: PVSC requests this section be deleted from its Individual NJPDES permit in its entirety as PVSC does not own or operate any CSO outfalls. This includes the CMP Work Plan and CMP Report. Alternatively, this should be a requirement of the CSS permittee. [15] [42]

195. COMMENT: Section G.9 addresses compliance monitoring regarding the effectiveness of CSO control measures. As JMEUC does not have such discharges, this provision should not be applicable where compliance monitoring requirements for JMEUC should be limited to STP effluent monitoring. [9]

RESPONSE 192-195: The Department disagrees with the contention that this section should be deleted from the NJPDES CSO permits. Please refer to **RESPONSES 26-42** of Section A of the Response to Comments document, which explains the inclusion of all LTCP elements in every CSO permit. While STP permittees may not own outfalls, they are expected to play a key role in evaluating and implementing CSO control measures, which may include improvements and expansion of STP-owned infrastructure. All permittees within a hydraulically connected system must coordinate their compliance monitoring efforts to determine the effectiveness of their individual efforts and the overall CSO control plan.

Where multiple permittees within a single hydraulically connected system cooperate to prepare a single LTCP, the permittees are expected to submit a single CMP work plan describing their coordinated compliance monitoring program.

No changes have been made to the Final permit(s) as a result of these comments.

196. COMMENT: Section G.9.a.vi includes a listing of previous studies that have been undertaken related to this matter for the permittee. The Department should furnish the permittees with copies of these and other appropriate reports, studies and references, prior to

the issuance of the Final permit. This information would assist the permittee with the schedule as well as the coordination of the various requirements of the permit. [32]

RESPONSE 196: All previous studies that have been identified in the NJPDES CSO permits are part of the administrative record. The administrative record is available for review and is on file at the offices of the Department, located at 401 East State Street, Trenton, New Jersey. It is available for inspection, by appointment, Monday through Friday, between 8:30 A.M. and 4:00 P.M. Appointments for inspection may be requested through the OPRA office. Details are available online at www.nj.gov/dep/opra, or by calling (609) 341-3121. Copies can be made available upon request through the OPRA office.

No changes have been made to the Final permit(s) as a result of this comment.

197. COMMENT: The reference in Section G.9.a to previous studies is relevant only to the baseline monitoring. We suggest deleting the entire paragraph, the list of previous studies, and the next paragraph that begins with: "A complete list of studies …" This information is repeated in Section G.1.a, and is not directly relevant to compliance monitoring. [33] [34] [40]

RESPONSE 197: The Department agrees that the references in Section G.9.a concern existing studies that could be utilized for baseline monitoring where similar references are included in Part IV.G.1.a. The Department maintains that while there may be some redundancy with Part IV.G.1.a, it is useful to note again that existing studies can be utilized for the purpose of the CMP.

No changes have been made to the Final permit(s) as a result of this comment.

198. COMMENT: In Part IV.G.9.a.ii replace "(days/hours per month)" with "(days or hours per month)." How best to characterize CSO discharge frequency for the purpose of compliance monitoring should be determined in the CMP work plan. [33] [34] [40]

RESPONSE 198: Part IV.G.9.b.ii (formerly Part IV.G.9.a.i) states "Discharge frequency for each CSO (days/hours per month)." The Department's intent is for permittees to track the days and hours per month of a CSO discharge for the purposes of the CMP in order to document and verify CSO controls. Note that this is more precise than the monitoring requirements of Part III (MRF) of the permit. The Department agrees that this condition should be clarified and has revised this condition as follows:

> "ii. Discharge frequency for each CSO (days and ~~/~~hours per month)."

This change affects Part IV.G.9.b.ii of the Final permits where the parameter has been changed to "Discharge frequency for each CSO (days and/hours per month)."

199. COMMENT: Delete Part IV.G.9.a.iii as there is no requirement in the National CSO Policy or guidance that compliance monitoring include the start and stop times for each calendar day of CSO discharge. It may make more sense to simply characterize the number of days that an

overflow occurs, consistent with the monitoring requirements in Section III of the Draft permit. [33] [34] [40]

RESPONSE 199: The Department has revised Part IV.G.9.b.iii (formerly Part IV.G.9.a.iii) to match other permit requirements including the MRF. Part IV.G.9.b.iii is revised as follows:

> "iii. Duration of each discharge ~~(event)~~ for each CSO (~~start and stop times for each calendar day~~ number of days)"

The Department maintains that information regarding the duration of discharge for CSO discharges are useful and are consistent with the intent of the National CSO Policy.

This change affects Part IV.G.9.b.iii of the Final permits.

200. COMMENT: The Department lists a series of "necessary monitoring" in paragraphs a.ii, iii, iv, v, and vi to do baseline and post construction monitoring. These may not be applicable to the monitoring situations that may be encountered in the implementation of the LTCP. The selection of appropriate monitoring protocols is the function of a work plan, as required in this section. Therefore, it is recommended that sections ii, iii, iv, v, and vi deleted. [20] [29] [32] [35] [42] [44]

RESPONSE 200: Part IV.G.9.a.i through Part IV.G.9.a.vi, as indicated in the Draft permits, have been renumbered as Part IV.G.9.b.i through Part IV.G.9.b.vi. The National CSO Policy requires permittees to institute a monitoring program that measures the frequency, duration, flow rate, volume and pollutant concentration of CSO discharges and assess the impact of the CSOs on the receiving waters. N.J.A.C. 7:14A-11 Appendix C Part II.C.1.c. These requirements are incorporated into the permit at Part IV.G.9.b for compliance monitoring in a manner consistent with the National CSO Policy.

No additional changes have been made to the Final permit(s) as a result of this comment.

201. COMMENT: Delete Section G.9.a.vi. There is no requirement in the National CSO Policy or guidance that compliance monitoring include characterization monitoring and modeling of the CSS, nor is there any technical reason they be included. This requirement far exceeds federal requirements, and would be both burdensome and unnecessary. Compliance monitoring should be limited to the STP effluent monitoring as required within the permit. [9] [33] [34] [40]

RESPONSE 201: Part IV.G.9.a.vi as included in the Draft permits was intended to be a cross-reference to Section G.1 and was not intended to create additional requirements for permittees. However, the Department agrees that a cross reference is no longer necessary in this section as the requirements of LTCP #1 are described sufficiently in Section G.1. Therefore, the following change has been made to the Final permits:

> "~~vi. Characterization monitoring and modeling of the CSS in accordance with Section G.1.~~"

This change affects Part IV.G.9.b of the Final permits.

202. COMMENT: Section G.9.b states "For the Demonstration Approach, the above monitoring must be ongoing every year upon LTCP approval to document trends in water quality due to CSO discharges." The National CSO requires baseline and post-construction compliance monitoring. Therefore, delete "LTCP approval" to "completion of one or more planned CSO Controls." [20] [42] [32] [29] [44] [40] [35]

203. COMMENT: Regarding Section G.9.b, it is unclear as to whether this is a continuous process or something that needs to be conducted on an annual basis? Please clarify. [12]

204. COMMENT: Regarding Section G.9.b, the National CSO Policy requires baseline and post-construction compliance monitoring. Therefore, replace this sentence with: "For the Demonstration Approach, the above monitoring must be performed each year after completion of one or more selected CSO controls in order to document trends in water quality as a result of the CSO controls." [33] [34]

205. COMMENT: Part IV.G.9.c states that the Department may grant a reduction in compliance monitoring if the permittee follows the Presumption Approach. What is the basis for the reduction? The Demonstration Approach requires a much more rigorous analysis and the use of calibrated water quality modeling to demonstrate compliance with WQS and attainment/maintenance of designated use. It would seem that the Demonstration Approach would provide a sound technical justification for a reduction in compliance monitoring. [28] [31]

206. COMMENT: Regarding Part IV.G.9.c the National CSO Policy requires baseline and post-construction compliance monitoring. Therefore, replace this sentence with: "For the Presumption Approach, the above monitoring may be reduced, with prior Departmental approval, after implementation of the CSO controls." [33] [34]

RESPONSE 202-206: The Department has revised conditions Part IV.G.9.b and Part IV.G.9.c (as contained in the Draft permits) to consolidate the monitoring requirements under the Presumption and Demonstration Approaches into one permit condition namely Part IV.G.9.c in the Final permits. The Department's intent is to require CMP baseline monitoring in the first year of the permit, and then to require monitoring on an ongoing basis after the Department's approval of the LTCP regardless of which approach is chosen. Because CSO controls are expected to be implemented on a phased basis and completion of all CSO controls may extend over multiple permit cycles, it is appropriate to require ongoing, interim monitoring to evaluate the effectiveness of controls as they are constructed.

The Department has revised all permits to clarify Part IV.G.9.c as follows (note that the following permit condition has been deleted):

"~~b~~c.~~For the Demonstration Approach, t~~ The above monitoring must be ~~ongoing~~ completed for the baseline CMP Report and then ~~every year~~ at intervals as determined by the

Department based on the implementation schedule in the approved LTCP but no less than once per permit cycle ~~upon LTCP approval to document trends in water quality due to CSO discharges~~. The results must be submitted in the Progress Reports required in Section D.4.

~~d. For the Presumption Approach, the above monitoring may be reduced, with prior Departmental approval, during construction/implementation of the CSO controls."~~

Additionally, there was a second paragraph in Part IV.G.9.a.vi which has been moved to Part IV.G.9.d in the Final permits. A generalized version of this language is as follows:

"~~vi~~…
d. For the purposes of Part IV.G.9.b, the ~~The~~ permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information…"

This change affects Part IV.G.9.c and Part IV.G.9.d of the Final permits.

Acronyms Generally Used in the Response to Comments:

"ACO" means Administrative Consent Order
"ALCOSAN" means Alleghany County Sanitary Authority, Pennsylvania
"BCUA" means Bergen County Utilities Authority
"CBOD5" means 5-day Carbonaceous Oxygen Demand
"CCMUA" means Camden County Municipal Utilities Authority
"CFR" means Code of Federal Regulations
"CMP" means Compliance Monitoring Program
"CSM" means Combined Sewer Management
"CSO" Combined Sewer Overflow
"CSOPPP" means Combined Sewer Overflow Pollution Prevention Plan
"CSO Strategy" means National Combined Sewer Overflow Control Strategy
"CSS" means Combined Sewer System
"CWA" means the Federal Act or the Clean Water Act
"DCA" means Department of Community Affairs
"DEP" or "NJDEP" means New Jersey Department of Environmental Protection or the Department
"DLA" means Delegated Local Agency
"DMR" means Discharge Monitoring Report
"DRBC" means Delaware River Basin Commission
"DSN" means Discharge Serial Number
"DWO" means Dry Weather Overflow
"EDP" means Effective Date of Permit
"EPA" or USEPA" means United States Environmental Protection Agency
"FCA" means Financial Capability Assessment
"FEMA" means Federal Emergency Management Agency
"FOG" means Fats, Oils and Greases

"GI" means Green Infrastructure
"GIS" means Geographic Information System
"I/I" means Inflow and Infiltration
"IPP" means Industrial Pretreatment Program
"JCO" means Judicial Consent Order
"JFK Airport" means John F. Kennedy International Airport
"JMEUC" means Joint Meeting of Essex and Union Counties or Joint Meeting
"LTCP" means Long Term Control Plan
"MCUA" means Middlesex County Utilities Authority
"MEG" means Model Evaluation Group
"MGP" means Master General Permit
"MLUL" means Municipal Land Use Law
"MS4" means Municipal Separate Storm Sewer System
"MUA" means Municipal Utilities Authority
"National Policy" means National Combined Sewer Overflow Control Policy
"NBMUA" means North Bergen Municipal Utilities Authority
"NHSA" means North Hudson Sewerage Authority
"NJ" means New Jersey
"N.J.A.C." means New Jersey Administrative Code
"NJEIT" means New Jersey Environmental Infrastructure Trust
"NJDOT" means New Jersey Department of Transportation
"NJPDES" means New Jersey Pollutant Discharge Elimination System
"N.J.S.A." means New Jersey Statutes Annotated
"NJTPA" means North Jersey Transportation Planning Authority
"NMCs" means Nine Minimum Controls
"NOAA" means National Oceanic and Atmospheric Administration
"NPDES" means National Pollutant Discharge Elimination System
"NRDC" means Natural Resources Defense Council
"NYDEC" means New York Department of Conservation
"NY/NJ" means New York/New Jersey
"O&M" means Operation and Maintenance
"OPRA" means Open Public Records Act
"PAHs" means polycyclic aromatic hydrocarbons
"PCBs" means Polychlorinated biphenyls
"POTW" means Publicly Owned treatment Works
"PVSC" means Passaic Valley Sewer Commission
"RQL" means Recommended Quantification Level
"QAPP" means Quality Assurance Project Plan
"QA/QC" means Quality Assurance/Quality Control
"QL" means Quantification Level
"RSIS" means Residential Site Improvement Standards
"RWBR" means Reclaimed Water for Beneficial Reuse
"SA" means Sewage Authority
"SDWA" Safe Drinking Water Act
"SE" means Saline Waters of Estuaries
"S/F" means Solids/Floatables

“SIUs” means Significant Indirect Users
“SOP” means Standard Operating Procedure
“SSO” Sanitary Sewer Overflow
“STP” Sewage Treatment Plant
“SWQS” means New Jersey Surface Water Quality Standards
“TMDL” means Total Maximum Daily Load
“TSS” means Total Suspended Solids
“USGS” means United States Geological Survey
“WPCA” means New Jersey Water Pollution Control Act
“WQBELs” means Water Quality Based Effluent Limitations
“WQMP” means Water Quality Management Plan
“WQS” means Water Quality Standards

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: NJ0108723

Final: Surface Water Minor Mod Permit Action

Permittee:
Jersey City MUA
555 Route 440
Jersey City, NJ 07305

Co-Permittee:

Property Owner:
Jersey City MUA
555 Route 440
Jersey City, NJ 07305

Location Of Activity:
Jersey City MUA
Combined Sewer Collection System
Jersey City, Hudson County

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
CSM -Combined Sewer Management (Minor Mod)	10/01/2015	07/01/2015	06/30/2020
CSM -Combined Sewer Management (Renewal)	03/12/2015	07/01/2015	06/30/2020

Joseph Mannick

By Authority of:
Commissioner's Office

DEP AUTHORIZATION
Joseph Mannick, Supervisor
Bureau of Surface Water Permitting
Water Pollution Management Element
Division of Water Quality

(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. Operator Certification

a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.

i. Notifications shall be submitted to:
NJDEP
Bureau of Licensing and Pesticide Operations
Mail Code 401-04E
P.O. Box 420
Trenton, New Jersey 08625-0420
(609)777-1012.

b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

7. Operation Restrictions

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

8. Residuals Management

a. The permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:

i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;

ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;

iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;

iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;

v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and

vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.

vii. Residual that is disposed in a municipal solid waste landfill unit shall meet the requirements in 40 CFR Part 258 and/or N.J.A.C. 7:26 concerning the quality of residual disposed in a municipal solid waste landfill unit. (That is, passes the Toxicity Characteristic Leaching Procedure and does not contain "free liquids" as defined at N.J.A.C. 7:14A-1.2.)

b. If any applicable standard for residual use or disposal is promulgated under section 405(d)of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.

c. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtimes at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.

d. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.

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 an approved LTCP fail to meet WQS or protect designated uses.

PART III
LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
001A CSO	Penhorn Creek	FW2-NT/SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 001A into the Penhorn Creek approximately 650-feet west of Tonnele Avenue along the west side of Secaucus Road at:
Latitude N: 40d 45m 39.2s
Longitude W: 74d 03m 11.5s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

For this outfall, the total quantity of Solids/Floatables removed from all outfalls shall be reported here 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 - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1 - Initial **PHASE Start Date:** 07/01/2015 **PHASE End Date:** 12/31/2015

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	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

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

Comments:

For this outfall, the total quantity of Solids/Floatables removed from all outfalls shall be reported here 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 - A - 2: Surface Water DMR Limits and Monitoring Requirements

PHASE: 2 - Final **PHASE Start Date:** 01/01/2016 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
002A CSO	Penhorn Creek	FW2-NT/SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 002A into the Penhorn Creek approximately 1500-feet west of the west end of Manhattan Avenue at:
Latitude N: 40d 44m 50.7s
Longitude W: 74d 04m 10.3s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
003A CSO	Hackensack River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 003A into the Hackensack River approximately 500-feet west of the intersection of St Pauls Avenue and Duffield Avenue at:
Latitude N: 40d 44m 31.0s
Longitude W: 74d 04m 36.9s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

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

Location Description

The permittee is authorized to discharge combined sewage from Outfall 004A into the Hackensack River approximately 250-feet south of the west end of Howell Street at:
Latitude N: 40d 44m 24.3s
Longitude W: 74d 04m 44.1s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
005A CSO	Hackensack River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 005A into the Hackensack River at the west end of Broadway at:
Latitude N: 40d 44m 22.2s
Longitude W: 74d 04m 56.2s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
006A CSO	Hackensack River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 006A into the Hackensack River at the west end of Sip Avenue at:
Latitude N: 40d 44m 04.3s
Longitude W: 74d 04m 52.9s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
007A CSO	Hackensack River	SE3(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 007A into the Hackensack River at the west end of Duncan Avenue at:
Latitude N: 40d 44m 03.4s
Longitude W: 74d 05m 37.11s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
008A CSO	Hackensack River	SE3(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 008A into the Hackensack River at the west end of Clendenny Avenue at:
Latitude N: 40d 43m 24.28s
Longitude W: 74d 05m 33.75s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
009A CSO	Hackensack River	SE3(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 009A into the Hackensack River at the west end of Claremont Avenue at:
Latitude N: 40d 43m 10.58s
Longitude W: 74d 05m 51.81s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
010A CSO	Hackensack River	SE3(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 010A into the Hackensack River at the west end of Fisk Street at:
Latitude N: 40d 43m 03.59s
Longitude W: 74d 06m 4.48s

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:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
011A CSO	Newark Bay	SE3(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 011A into Newark Bay approximately 500-feet southwest of the intersection of Cherry Street and Cottonwood Street at:
Latitude N: 40d 42m 13.77s
Longitude W: 74d 06m 23.17s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
013A CSO	Newark Bay	SE3(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 013A into Newark Bay at the west end of Mina Drive at:
Latitude N: 40d 41m 58.49s
Longitude W: 74d 06m 16.24s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
014A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 014A into the Hudson River approximately 3000-feet northeast of the intersection of Port Jersey Blvd and Colony Road at:
Latitude N: 40d 40m 47s
Longitude W: 74d 04m 25s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
015A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 015A into the Hudson River approximately 500-feet southeast of the intersection of Freedom Way and Chapel Avenue at:
Latitude N: 40d 41m 19s
Longitude W: 74d 04m 33s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
016A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 016A into the Hudson River approximately 1300-feet east of the intersection of Thomas McGovern Drive and Freedom Way at:
Latitude N: 40d 41m 47s
Longitude W: 74ds 03m 04s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
018A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 018A into the Hudson River approximately 200-feet south of the west end of Aetna Street at:
Latitude N: 40d 42m 46s
Longitude W: 74d 03m 13s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
020A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 020A into the Hudson River at the east end of Essex Street at:
Latitude N: 40d 42m 45s
Longitude W: 74d 01m 60s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
025A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 025A into the Hudson River at the east end of 2nd Street at:
Latitude N: 40d 43m 16s
Longitude W: 74d 01m 53s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
026A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 026A into the Hudson River at the east end of Thomas Gangemi Drive at:
Latitude N: 40d 43m 26.90s
Longitude W: 74d 02m 02.49s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
028A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 028A into the Hudson River at the east end of 14th Street at:
Latitude N: 40d 43m 52.94s
Longitude W: 74d 01m 51.51s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
029A CSO	Hudson River	SE2(C2)	CSM - Combined Sewer Management

Location Description

The permittee is authorized to discharge combined sewage from Outfall 029A into the Hudson River approximately 450-feet east of the intersection of 18th Street and Marin Blvd at:
Latitude N: 40d 44m 03.57s
Longitude W: 74d 02m 14.59s

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water DMR Reporting Requirements:

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

Comments:

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

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

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

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

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Notes and Definitions

A. Footnotes

1. These notes are specific to this permit

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

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

a. NJDEP's CSO main website and related links can be found at http://www.nj.gov/dep/dwq/cso.htm

b. EPA's Combined Sewer Overflows Principal Guidance Documents can be found at http://water.epa.gov/polwaste/npdes/cso/Guidance-Documents.cfm

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

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

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

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

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

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

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

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

B. Definitions

1. These definitions are specific only to this permit

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

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

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

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

C. NINE MINIMUM CONTROL REQUIREMENTS

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

D. NINE ELEMENTS OF THE LONG TERM CONTROL PLAN

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

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

Combined Sewer Management

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. CSO 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. CSO 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) may be provided to the permittee in either a paper format or in an electronic file format. Unless otherwise noted, all requirements below pertain to both paper and electronic formats.

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. Any MRFs in paper format shall be submitted to the following address(es):

   i. NJDEP
   Mail Code - 401-02B
   Division of Water Quality - Permit Administration Section
   P.O. Box 420
   Trenton, New Jersey 08625-0420.

f. 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. Paper copies must be available for on-site inspection by DEP personnel or provided to the DEP upon written request.

g. All MRFs shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the combined sewer system.

h. 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).

i. Monitoring results shall be submitted in accordance with the current Monitoring Report Form Manual and any updates thereof.

j. 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 paper or 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:

   i. "I certify under penalty of law that this document and all attachments 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, 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/permittees 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/permittees in the hydraulically connected sewer system regarding implementation of the NMCs and LTCPs. This information shall be provided/updated in the quarterly Progress Reports.

d. The permittee shall also notify the PVSC of all CSO construction related activities in their collection system on a quarterly basis. Notification through the TWA process is sufficient for this purpose.

e. The permittee shall submit all information required by this permit via email or other electronic format acceptable to the Department to NJCSOProgram@dep.nj.gov. Until the Department can accept any file larger than 20 megabytes (MB), any larger file can be broken up into smaller segments and sent separately or can be sent via mail delivery on CDs or DVDs.

2. Updated Nine Minimum Control (NMC) Submittal Requirements

a. The permittee shall submit GPS data in degrees-minutes-seconds (at a minimum to the the tenth of a second accuracy) for all CSO regulators, pump stations and CSO outfalls owned/operated by the permittee in accordance with N.J.A.C. 7:1D-Appendix A, and NJ GIS protocol at http://www.state.nj.us/dep/gis/standard.htm. The permittee shall submit this GPS data: within 6 months from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

b. The permittee shall submit a PDF of a sewer map: within 12 months from the effective date of the permit (EDP). This map shall depict the actual locations of the separate and combined sanitary sewers, CSO regulators and outfalls owned/operated by the permittee. (Activity #: DSW130001 - Effective: 7/1/2015)

c. The permittee shall install signs for each CSO outfall within 6 months from the effective date of the permit (EDP), in accordance with Section F.8. The permittee shall retain information at the offices of the permittee including a chart listing the CSO outfall designator and the physical address/location of the sign for each CSO outfall.

3. Long Term Control Plan (LTCP) Submittal Requirements

a. The Department encourages a single LTCP to be developed and submitted on behalf of all of the permittees in a hydraulically connected sewer system.

b. The permittee shall develop an approvable LTCP that will include the Elements contained in Section G. The LTCP shall consist of the following steps and be submitted according to the schedule below.

   i. Step 1a - System Characterization Work Plan for the LTCP - In accordance with Section G.1., unless otherwise approved by the Department in writing, the permittee shall submit an approvable System Characterization Work Plan: within 6 months from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

   ii. Step 1b1 - In accordance with G.1., the permittee shall submit the System Characterization Report: within 36 months from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

   iii. Step 1b2 - In accordance with G.2., the permittee shall submit the Public Participation Process Report: within 36 months from the effective date of the permit (EDP).

   iv. Step 1b3 - In accordance with G.3., the permittee shall submit the Consideration of Sensitive Areas Information of the LTCP: within 36 months from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

   v. Step 2 - Development and Evaluation of Alternatives for the LTCP - In accordance with Sections G.2. through G.5. and G.9., the permittee shall submit an approvable Development and Evaluation of Alternatives Report: within 48 months from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

   vi. Step 3 - Selection and Implementation of the LTCP: In accordance with Sections G.2. and G.6. through G.9., the permittee shall submit an approvable Selection and Implementation of Alternatives Report: within 59 months from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

   vii. Upon Departmental approval of the LTCP, the permittee shall begin implementation of the LTCP in accordance with the schedule contained therein.

c. In accordance with Section G.9., the permittee shall submit an approvable baseline Compliance Monitoring Program (CMP) Work Plan: within 6 months from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

d. Unless otherwise specified by the Department, in accordance with Section G.9. and the approved work plan, the permittee shall submit an approvable baseline CMP Report and data: within 36 months from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

4. CSO Progress Report Submittal Requirements

a. The permittee shall Submit a progress report: within twenty-five (25) days after the end of every quarter beginning from the effective date of the permit (EDP). (Activity #: DSW130001 - Effective: 7/1/2015)

b. The Progress Reports shall be prepared in accordance with the following requirements:

   i. The Progress Reports shall follow the outline structure of the permit requirements in Sections F and G.

ii. The Progress Reports shall include, at a minimum, a summary of all permit compliance deadlines, their progress to date and CSO control measures implemented by the permittee to comply with the NMCs. The progress reports shall also include a prioritized schedule for additional CSO control measures to be implemented, and the effectiveness of the implemented CSO control measures, pursuant to this permit for the previous calendar quarter.

iii. The first Progress Report shall include a summary of all CSO control measures implemented to date and the effectiveness of those control measures.

iv. 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.

v. Each Progress Report shall contain a detailed discussion of, and document compliance with, the continued implementation of the NMCs and the manner in which all owners/operators of the hydraulically connected collection system participated in the development of the LTCP, including information regarding the development and status of the telephone hotline/website pursuant to Section F.8.

vi. Upon Departmental approval of the LTCP, the permittee shall begin implementation of the permittee's CSO control measures in accordance with the schedule in the approved LTCP.

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 Regular Maintenance Program Requirements

a. The permittee shall continue to implement and update annually, 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 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.

b. 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.

c. The permittee shall provide adequate operator staffing for the treatment works.

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.

   iii. An updated characterization of the entire collection system owned/operated by the permittee that conveys flows to the treatment works. The permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information. A complete list of studies performed by all CSO permittees in PVSC's hydraulically connected system is summarized in Appendix B at the end of this permit.

f. This characterization in Section F.1.e.iii above shall include a spreadsheet, organized by CSO outfall, as appropriate, of the capacity, dimensions, age, type of material, and specific location of the items listed below. This spreadsheet shall be completed no later than EDP + 6 months.

   i. CSO Outfalls (if applicable);

   ii. Tide gates (if applicable);

   iii. Solids/floatables controls (if applicable);

   iv. Regulators (if applicable);

   v. Gravity lines and force mains (if applicable), including size, length and direction of flow;

   vi. Pump stations (if applicable);

   vii. Significant Indirect Users (SIUs); and

   viii. Specific locations that have historically experienced the following: blockages, bottlenecks, flow constrictions, sewer overflows including to basements, streets and other public and private areas, or related incidences.

g. The permittee shall delineate the characterization information required in Section F.1.f on a GIS map, as applicable, pursuant to N.J.A.C. 7:1D-Appendix A and shall follow the NJ GIS protocol at http://www.state.nj.us/dep/gis/standard.htm. This map shall be completed on or before the first annual update of the O&M Program and Manual.

h. The permittee shall review its rules, ordinances, and/or its sewer use agreements and create an anticipated schedule to revise them within 6 months of the EDP if necessary. In general, this schedule shall not extend beyond the due date for the LTCP as per Part IV.D.3.b.iv. This schedule shall require the customer municipalities to:

   i. operate and maintain their treatment works,

   ii. identify I/I and reduce it to meet the definition of non-excessive infiltration (in combined and separately sewered areas) and non-excessive inflow (in separately sewered areas) where both terms are defined in N.J.A.C. 7:14A-1.2, and

   iii. identify and eliminate interconnections and cross-connections in storm sewers.

i. 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.

j. 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 for the following items:

   i. 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. Ensure that the storage and conveyance of combined sewage to the STP is maximized in accordance with Sections F.2 and F.4.

   iii. Ensure that the impacts from SIUs contributing to the CSOs are minimized in accordance with Section F.3.

   iv. Ensure there will be no dry weather overflows from any CSO in accordance with Section F.5.

   v. Conduct a visual inspection program of sufficient scope and frequency of the CSS to provide reasonable assurance that unpermitted discharges, obstructions, damage, and DWOs will be discovered.

   vi. Ensure the solids/floatables appurtenances 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. 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. Provide a gravity sewer and catch basin inspection schedule and clean as necessary.

ix. 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.

x. Remove within one (1) week of the permittee becoming aware, any 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. Remove any other obstructions due to debris, Fats, Oils and Greases, and sediment buildup, or other foreign materials in the collection system owned/operated by the permittee as soon as practicable.

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 for ongoing I/I reduction strategies to meet the definition of non-excessive infiltration (in combined and separately sewered areas) and non-excessive inflow (in separately sewered areas) as defined in N.J.A.C. 7:14A-1.2 through the identification of excessive I/I sources and the prioritization and implementation of I/I reduction projects.

xiii. Identify the equipment currently owned, operated, and maintained for investigating and maintaining the CSS and, at a minimum, reference the appropriate equipment manuals.

xiv. Provide procedures whereby wet weather flows are maximized for conveyance to the STP and discharges from CSOs are minimized.

k. The permittee shall incorporate an Asset Management Plan as part of the overall O&M strategy. This plan shall include an 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) allocated in the permittee's budget. This information shall be included in the permittee's budget as prepared and submitted to Department of Community Affairs, if appropriate. The Asset Management Plan shall be completed no later than EDP+12 months.

l. The permittee shall also include in the O&M Program and corresponding Manual, an Emergency Plan, 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 services. The Emergency Plan shall include Standard Operating Procedures (SOPs), which ensure the effective operation of the treatment works under emergency conditions, such as extreme weather events and extended periods of no power.

m. The permittee shall amend the O&M Program & Manual on at least an annual frequency 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 the submittal requirements in Section D.4.

2. Maximum use of the collection system for storage

a. The permittee shall 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 possible 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. The permittee shall determine the locations, associated CSO outfalls and discharge volume, loading and toxicity of the SIUs for the entire collection system which is owned/operated by the permittee; determine and prioritize the potential environmental impact of these SIUs by CSO outfall; include this information in the characterization portion of the O&M Program and Manual as required in Section F.1. This information shall be updated annually in the Progress Report in accordance with Section D.4.

4. Maximization of flow to the POTW for treatment

a. The permittee shall 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 evaluate and implement alternatives for increasing flow to the STP in accordance with i and ii below that do not require extensive engineering studies or significant construction costs:

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., is not permitted.

c. The captured debris shall be removed from each solids/floatables control system as necessary to ensure that there will be no flow restrictions during the next CSO discharge event.

d. All captured debris removed from the solids/floatables control system must be disposed of properly at a permitted solid waste facility authorized to accept grit and screening materials from wastewater treatment facilities in accordance with N.J.A.C. 7:14A and Part II of this permit.

7. Implementation of Pollution Prevention Measures

a. The permittee shall continue to implement and upgrade pollution prevention measures necessary to prevent and limit contaminants from entering the entire collection system owned/operated by the permittee that conveys flows to the treatment works. Unless demonstrated to the Department to be impracticable measures, shall include, but not be limited to, the following:.

i. Implementation of a regular street cleaning program.

ii. Retrofitting of existing storm drains to meet the standards in Appendix A, where such inlets are in direct contact with repaving, repairing (excluding repair of individual potholes), reconstruction, resurfacing (including top coating or chip sealing with asphalt emulsion or a thin base of hot bitumen) or alterations of facilities owned/operated by the permittee. For exemptions to this standard see "Exemptions" listed in Appendix A.

iii. Implementation of stormwater pollution prevention rules and ordinances.

iv. Implementation of solid waste collection and recycling ordinances.

v. Implementation of public education programs.

b. The permittee shall enforce street litter ordinances and rules and regulations on illegal connections and unauthorized discharge(s) into the POTW.

c. The permittee shall submit a schedule to revise applicable rules, ordinances and sewer use agreements to address the reduction of inflow and infiltration (I/I) into the collection system in accordance with Part IV.F.1.h.

8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts

a. The permittee shall post CSO Identification Signs 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. Any requests for such alternatives shall be submitted to the NJDEP within 30 days of EDP.

   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 NJ0108723.
   - 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) at the address listed in C.1.e.i or by email in D.1.e., 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. On or before EDP +12 months the permittee shall create and maintain on a daily basis a telephone hot line or website (in an approved open source and/or syndicated format that is compatible with NJDEPs computer systems) for interested citizen inquiries to provide up-to-date information regarding where CSO discharges may be occurring or that discharges are not or are unlikely to be occurring.

9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls

a. The permittee shall monitor the CSO discharge events and record the date, "duration of discharge", rainfall, location of rain gauge and quantity of solids/floatables removed for each CSO and discharge event through appropriate modeling or by an appropriately placed flow meter/totaling device, level sensor, or other appropriate measuring device, and report the required information on the MRF as required by Part III of this permit.

G. LONG TERM CONTROL PLAN REQUIREMENTS

1. Characterization Monitoring and Modeling of the Combined Sewer System

a. The permittee, as per D.3.a and G.10, shall submit an updated characterization study that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling and other means as appropriate to establish the existing baseline conditions, evaluate the efficacy of the CSO technology based controls, and determine the baseline conditions upon which the LTCP will be based. The permittee shall work in coordination with the combined sewer communities which are hydraulically connected to PVSC for appropriate Characterization, Monitoring and Modeling of the Sewer System.

b. The characterization shall:
- include a thorough review of the entire collection system that conveys flows to the treatment works, including areas of sewage overflows, including to basements, streets and other public and private areas, to adequately address the response of the CSS to various precipitation events;
- identify the number, location, frequency and characteristics of CSOs; and
- identify water quality impacts that result from CSOs.

Ambient in-stream monitoring may be performed in accordance with the guidance document entitled: "Receiving Waters Monitoring Work Plan Guidance for the CSO Program" available at www.state.nj.us/dep/dwq.

c. The permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information. A list of the studies performed by the CSO permittees in this hydraulically connected sewer system is included as Appendix B at the end of this permit.

d. The major elements of the sewer system characterization are noted below:

i. Rainfall Records - The permittee shall examine the historical rainfall record for the geographic area of its existing CSS using sound statistical procedures and best available data. The permittee shall evaluate flow variations due to precipitation events in the receiving waterbody to correlate between CSOs and receiving water conditions.

ii. Combined Sewer System Characterization - the permittee shall evaluate sewer system records, field inspections gathered from the O&M Characterization required under Section F.1. (and previous relevant studies), and other activities necessary to understand the number, location and frequency of overflows and their location relative to sensitive areas and to pollution sources in the collection system, such as SIUs.

iii. CSO Monitoring - Using all available information the permittee shall develop and/or update a previously existing, comprehensive, representative monitoring program that measures the frequency, duration, flow rate, volume and pollutant concentration of CSO discharges and assesses the impact of the CSOs on the receiving waters. The monitoring data may utilize existing data from previous studies, and must include necessary CSO effluent and ambient in-stream monitoring for pathogens (including current and recreational standards for bacteriological indicators (e.g., fecal coliform, Enterococcus and E. Coli)). Only ambient monitoring data collected in accordance with a Department-approved Quality Assurance/Quality Control program shall be used. A representative sample of overflow points can be selected that is sufficient to allow characterization of CSO discharges, their water quality impacts and to facilitate evaluation of control plan alternatives.

iv. Modeling - the permittee may employ NJDEP or EPA approved models, which include appropriate calibration and verification with field measurements, to aid in the characterization. If models are used they shall be identified by the permittee along with an explanation of why the model was selected and used in the characterization. The permittee should base its choice of a model on the characteristics of the entire collection system that conveys flows to the treatment works (including flows from other hydraulically connected municipal sewer systems), the number and location of overflow points, and the sensitivity of the receiving water body to the CSO discharges. The sophistication of the model should relate to the complexity of the system to be modeled and to the information needs associated with evaluation of CSO control options and water quality impacts. Because of the iterative nature of modeling sewer systems, CSOs, and their impacts, monitoring and modeling efforts are complementary and should be coordinated with other affected entities.

v. The permittee shall identify sensitive areas where CSOs occur. These areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters used for primary contact recreation (including but not limited to bathing beaches), public drinking water intakes or their designated protection areas, and shellfish beds.

2. Public Participation Process

a. The permittee shall submit the Public Participation Process Report to include appropriate input and participation with other hydraulically connected communities, in accordance with D.3.a and G.10. The permittees may use information from the previous submittals. A list of the previous submittals from the CSO permittees in this hydraulically connected sewer system is included as Appendix B at the end of this permit.

b. Implementation shall actively involve the affected public throughout each of the 3 Steps of the LTCP process. The affected public includes rate payers (including rate payers in the separate sewer sections), industrial users of the sewer system, persons who reside downstream from the CSOs, persons who use and enjoy the downstream waters, and any other interested persons. A Public Participation Process Report shall include the following elements:.

i. Conduct outreach to inform the affected/interested public (during the development of the permittee's LTCP) through various methods which may include: public meetings, direct mailers, billing inserts, newsletters, press releases to the media, postings of information on the permittee's website, hotline, development of advisory committees, etc.; and to.

ii. Invite members of the affected/interested public to join a Supplemental CSO Team to work with the permittee's assigned staff, consultants and/or contractors as required in Part IV, Section G.2.c. of the permit.

c. The permittee shall invite members of the affected/interested public to establish a Supplemental CSO Team to work with the permittee's assigned staff from Section F.1 and to work as an informal work group as a liason between the general public and the decision makers for the permittee. The goals of the Supplemental CSO Team could consist of the following elements:

i. Meet periodically to assist in the sharing of information, and to provide input to the planning process;

ii. Review the proposed nature and extent of data and information to be collected during LTCP development;

iii. Provide input for consideration in the evaluation of CSO control alternatives; and

iv. Provide input for consideration in the selection of those CSO controls that will cost effectively meet the Clean Water Act requirements.

3. Consideration of Sensitive Areas

a. The permittee's LTCP shall give the highest priority to controlling overflows to sensitive areas, in accordance with D.3.a and G.10. Sensitive areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters used for primary contact recreation (including but not limited to bathing beaches), public drinking water intakes or their designated protection areas, and shellfish beds.

b. The LTCP shall comply with the following requirements:

i. Prohibit new or significantly increased CSOs

ii. Eliminate or relocate CSOs that discharge to sensitive areas wherever physically possible and economically achievable, except where elimination or relocation would provide less environmental protection than additional treatment.

iii. Where elimination or relocation is not physically possible and economically achievable, or would provide less environmental protection than additional treatment, the permittee shall provide the level of treatment for remaining CSOs deemed necessary to meet WQS for full protection of existing and designated uses.

4. Evaluation of Alternatives

a. The permittee shall evaluate a reasonable range of CSO control alternatives, in accordance with D.3.a and G.10, that will meet the water quality-based requirements of the CWA using either the Presumption Approach or the Demonstration Approach (as described in Sections G.4.f.and G.4.g).

b. The permittee shall submit, as per Section D.3.b.v, the Evaluation of Alternatives Report that will enable the permittee, in consultation with the Department, the public, owners and/or operators of the entire collection system that conveys flows to the treatment works, to select the alternatives to ensure the CSO controls will meet the water quality-based requirements of the CWA, will be protective of the existing and designated uses in accordance with N.J.A.C. 7:9B, give the highest priority to controlling CSOs to sensitive areas, and address minimizing impacts from SIU discharges.

c. The permittee shall select either Demonstration or Presumption Approach for each group of hydraulically connected CSOs, and identify each CSO group and its individual discharge locations.

d. The Evaluation of Alternatives Report shall include a list of control alternative(s) evaluated for each CSO.

e. The permittee shall evaluate a range of CSO control alternatives predicted to accomplish the requirements of the CWA. In its evaluation of each potential CSO control alternative, the permittee shall use an NJDEP approved hydrologic, hydraulic and water quality models. The permittee shall utilize the models to simulate the existing conditions and conditions as they are expected to exist after construction and operation of the chosen alternative(s). The permittee shall evaluate the practical and technical feasibility of the proposed CSO control alternative(s), and water quality benefits of constructing and implementing various remedial controls and combination of such controls and activities which shall include, but not be limited to the controls below:

i. Green infrastructure.

ii. Increased storage capacity in the collection system.

iii. STP expansion and/or storage at the plant (an evaluation of the capacity of the unit processes must be conducted at the STP resulting in a determination of whether there is any additional treatment and conveyance capacity within the STP). Based upon this information, the permittee shall determine (modeling may be used) the amount of CSO discharge reduction that would be achieved by utilizing this additional treatment capacity while maintaining compliance with all permit limits

iv. I/I reduction to meet the definition of non-excessive infiltration and non-excessive inflow as defined in N.J.A.C. 7:14A-1.2 in the entire collection system that conveys flows to the treatment works to free up storage capacity or conveyance in the sewer system and/or treatment capacity at the STP, and feasibility of implementing in the entire system or portions thereof.

v. Sewer separation.

vi. Treatment of the CSO discharge.

vii. CSO related bypass of the secondary treatment portion of the STP in accordance with N.J.A.C. 7:14A-11.12 Appendix C, II C.7.

f. 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.

g. The "Demonstration" Approach, in accordance with N.J.A.C. 7:14A-11 Appendix C provides:
A permittee may demonstrate that a selected control program, though not meeting the criteria specified under the Presumption Approach above, is adequate to meet the water quality-based requirements of the CWA.

The permittee must demonstrate each of the following below:

i. The planned control program is adequate to meet WQS and protect designated uses, unless WQS or uses cannot be met as a result of natural background conditions or pollution sources other than CSOs.

ii. The CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment.

iii. The planned control program will provide the maximum pollution reduction benefits reasonably attainable.

iv. The planned control program is designed to allow cost effective expansion or cost effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS or designated uses.

5. Cost/Performance Considerations

a. The permittee shall submit in accordance with the submittal requirements at Sections D.3.a. and D.3.b.v., the cost/performance considerations that demonstrate the relationships among proposed control alternatives that correspond to those required in accordance with Section G.4. This shall include an analysis to determine where the increment of pollution reduction achieved in the receiving water diminishes compared to the increased costs. If the permittee chooses to pursue the "Presumption Approach" of ‘no more than an average of four discharge events per year', the permittee is not required to conduct this analysis for the other number of events (i.e. 0, 7, 10, 20). This analysis, often known as "knee of the curve", shall be among the considerations used to help guide selection of controls.

In accordance with Section G.1.a., the permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information, such as:.

i. Jersey City MUA:
•Jersey City Municipal Utilities Authority Cost and Performance Analysis Report, prepared by Malcolm Pirnie, Inc., dated April 2007.
•Jersey City Municipal Utilities Authority CSO Long Term Control Plan, Cost and Performance Analysis Report, Volume 2, Technical Guidance Manual, prepared by Hatch Mott MacDonald, dated December 2006.

A complete list of studies performed by all CSO permittees in PVSC's hydraulically connected system is summarized in Appendix B at the end of this permit.
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6. Operational Plan

a. Upon Departmental approval of the final LTCP and throughout implementation of the approved LTCP as appropriate, the permittee shall modify the O&M Program and Manual in accordance with D.3.a and G.10, to address the final LTCP CSO control facilities and operating strategies, including but not limited to, maintaining Green Infrastructure, staffing and budgeting, I/I, and emergency plans.

7. Maximizing Treatment at the Existing STP

a. The LTCP shall include the maximization of the removal of pollutants during and after each precipitation event at the STP, in accordance with D.3.a and G.10, ensuring that such flows receive treatment to the greatest extent practicable utilizing existing tankage for storage, while still meeting all permit limits.

b. The permittee shall incorporate the receiving STP's plan for maximizing flow and treatment at the STP.

8. Implementation Schedule

a. The permittee shall submit a construction and financing schedule in accordance with D.3.a and G.10, for implementation of Department approved LTCP CSO controls. Such schedules may be phased based on the relative importance of the adverse impacts upon water quality standards and designated uses, the permittee's financial capability, and other water quality related infrastructure improvements, including those related to stormwater improvements that would be connected to CSO control measures.

b. Upon Departmental approval of the LTCP, the permittee shall begin implementation of the LTCP in accordance with the schedule contained therein.

c. In accordance with Section D.3.b.vi., the permittee shall submit an implementation schedule, including yearly milestones, which considers the items listed below:

i. Adequately addressing areas of sewage overflows, including to basements, streets and other public and private areas.

ii. CSO overflows that discharge to sensitive areas as the highest priority.

iii. Use impairment of the receiving water.

iv. The permittee's financial capability including, but not limited to, consideration of the factors below:
- Median household income,
- Total annual wastewater and CSO control costs per household as a percent of median household income,
- Overall net debt as a percent of full market property value,
- Property tax revenues as a percent of full market property value,
- Property tax collection rate
- Unemployment, and
- Bond rating

v. Grant and loan availability.

vi. Previous and current residential, commercial and industrial sewer user fees and rate structures.

vii. Other viable funding mechanisms and sources of financing.

viii. Resources necessary to design, construct and/or implement other water related infrastructure improvements as part of an Asset Management Plan as per Part IV.F.1.

9. Compliance Monitoring Program (CMP)

a. The monitoring information collected from the ambient baseline monitoring phase of the CMP, in accordance with D.3.a., will be compared to subsequent CMP events during and after LTCP implementation to evaluate the effectiveness of implemented CSO controls.

b. The permittee shall implement a CMP adequate to: verify baseline and existing conditions, the effectiveness of CSO controls, compliance with water quality standards, and protection of designated uses. This CMP shall be conducted before, during and after implementation of the LTCP and shall include a work plan to be approved by the Department that details the monitoring protocols to be followed, including the following necessary monitoring listed below:

i. Ambient in-stream monitoring may be performed in accordance with the guidance document entitled: "Receiving Waters Monitoring Work Plan Guidance for the CSO Program" at www.state.nj.us/dep/dwq.

ii. Discharge frequency for each CSO (days and hours per month).

iii. Duration of each discharge for each CSO (number of days).

iv. Quality of the flow discharged from each CSO, which shall include pathogen monitoring at a minimum.

v. Rainfall monitoring in the vicinity of each CSO/municipality.

c. The above monitoring must be completed for the baseline CMP Report and then at intervals as determined by the Department based on the implementation schedule in the approved LTCP but no less than once per permit cycle. The results must be submitted in the Progress Reports required in Section D.4.

d. For the purposes of Part IV.G.9.b, the permittee may use previous studies to the extent that they are accurate and representative of a properly operated and maintained sewer system and of the currently required information. A list of the studies performed on the receiving waters is included in Appendix B at the end of this permit.

10. Permittee's LTCP Responsibilities

a. The permittee is responsible for submitting an LTCP that addresses all nine elements in Part IV.G.

Where multiple permittees own/operate different portions of a hydraulically connected CSS, the permittee is required to work cooperatively with all other permittees to ensure the LTCPs are consistent. The LTCP documents must be based on the same data, characterization, models, engineering and cost studies, and other information, where appropriate. Each permittee is required to prepare the necessary information for the portion of the hydraulically connected system that the permittee owns/operates and provide this information to the other permittees within the hydraulically connected system in a timely manner for LTCP submission.

APPENDIX A

Design Standards for Storm Drain Inlets

Grates in pavement or other ground surfaces, such as roads (including bridges), driveways, parking areas, bikeways, plazas, sidewalks, lawns, fields, open channels and stormwater basin floors used to collect stormwater from the surface into a storm drain or surface water body, shall meet the following standards:

1. The New Jersey Department of Transportation (NJDOT) bicycle safe grate standards described in Chapter 2.4 of the NJDOT Bicycle Compatible Roadways and Bikeways Planning and Design Guidelines (April 1996).

2. A grate where each individual clear space in that grate has an area of no more than seven (7.0) square inches, or is not greater than 0.5 inches across the smallest dimension.

3. For curb-openings inlets, including curb-opening inlets in combination inlets, the clear space in the curb opening, or each individual clear space if the curb opening has two or more clear spaces, shall have an area of no more than seven (7.0) square inches or be no greater than two (2.0) inches across the smallest dimension.

The following exemptions apply:

1. Where each individual clear space in the curb opening in existing curb-opening inlets do not have an area of more than nine (9.0) square inches.

2. Where the review agency determines that the standards would cause inadequate hydraulic performance that could not practicably be overcome by using additional or larger storm drain inlets.

3. Where flows from the water quality design storm as specified in N.J.A.C. 7:8 are conveyed through any device (e.g., end of pipe netting facility, manufactured treatment device, or a catch basin hood) that is designed, at a minimum, to prevent delivery of all solid and floatable materials that could not pass through one of the following:

    a. A rectangular space four and five-eighths inches long and one and one-half inches wide (this option does not apply for outfall netting facilities); or

    b. A bar screen having a bar spacing of 0.5 inches.

4. Where flows are conveyed through a trash rack that has parallel bars with one inch (1”) spacing between the bars, to the elevation of the water quality design storm as specified in N.J.A.C. 7:8.

5. Where the Department determines, pursuant to the New Jersey Register of Historic Places Rules at N.J.A.C. 7:4-7.2(c), that action to meet the standard is an undertaking that constitutes an encroachment or will damage or destroy the New Jersey Register listed historic property.

APPENDIX B

LIST OF STUDIES
PVSC and Hydraulically Connected Sewer Systems

PVSC:

- Passaic Valley Sewerage Commissioners CSO Characterization Study – Modeling Study, prepared by HydroQual, dated December 2003.
- Passaic Valley Sewerage Commissioners Public Participation Report, prepared by Hatch Mott Macdonald, dated April 2007.
- Cost and Performance Analysis Report for Domestic Treatment Works, prepared by Malcolm Pirnie, dated March 2007.
- Passaic Valley Sewerage Commissioners CSO Long Term Control Plan Cost and Analysis Report Volume 1 and Volume 2, prepared by Hatch Mott Macdonald, dated April 2007.

Bayonne:

- Combined Sewer Overflow Characterization Study and Work Plan, prepared by Hatch Mott MacDonald, dated February 14, 2003.
- Combined Sewer Overflow Discharge Characterization Study, Volume I – Final Monitoring Report, prepared by Hatch Mott MacDonald, dated November 2005.
- Combined Sewer Overflow Discharge Characterization Study, Volume II – Supplemental Data, prepared by Hatch Mott MacDonald, dated November 2005.
- Combined Sewer Overflow Discharge Characterization Study, Rainfall Monitoring Report, prepared by HydrolQual, Inc. and Hatch Mott MacDonald, dated August 2, 2006.
- CSO Long Term Control Plan, Cost & Performance Analysis Report, Volume 2 – Technical Guidance Manual, prepared by Hatch Mott MacDonald, dated December 2006.
- CSO Long Term Control Plan, Cost & Performance Analysis Report, Volume 1, prepared by Hatch Mott MacDonald, dated March 2007.
- Public Participation Report, prepared by Hatch Mott MacDonald, dated April 2007.

Jersey City:

- Jersey City Municipal Utilities Authority Combined Sewer System Modeling Study, prepared by Malcolm Pirnie, Inc., dated July 2007.
- Jersey City Municipal Utilities Authority Cost and Performance Analysis Report, prepared by Malcolm Pirnie, Inc., dated April 2007.
- Jersey City MUA Public Participation Report, as prepared through the NJCSO Group, prepared by Hatch Mott MacDonald, dated April 2007.
- Jersey City Municipal Utilities Authority CSO Long Term Control Plan, Cost and Performance Analysis Report, Volume 2, Technical Guidance Manual, prepared by Hatch Mott MacDonald, dated December 2006.

- JCMUA Rainfall and CSO Monitoring Study, Volume 1 of 3, prepared by Malcolm Pirnie, Inc., dated November 2005.
- JCMUA Rainfall and CSO Monitoring Study, Volume 2 of 3, prepared by Malcolm Pirnie, Inc., dated November 2005.
- JCMUA Rainfall and CSO Monitoring Study, Volume 3 of 3, prepared by Malcolm Pirnie, Inc., dated November 2005.
- Combined Sewer Overflow Discharge Characterization Study – JCMUA Combined Sewer System Monitoring Program Supplemental Proposal and Work Plan, prepared by Malcolm Pirnie, Inc., dated December 2004.
- Combined Sewer Overflow Discharge Characterization Study - JCSA Monitoring Proposal and Work Plan, prepared by Malcolm Pirnie, Inc., dated July 1996.
- Combined Sewer Overflow Discharge Characterization Study - Sewer System Inventory and Assessment Report, prepared by Malcolm Pirnie, Inc., dated July 1996.
- Combined Sewer Overflow Discharge Characterization Study - Service Area Drainage and Land Use Report, prepared by Malcolm Pirnie, Inc., dated July 1996.

North Bergen:

- North Bergen MUA Public Participation Report, prepared by Hatch Mott MacDonald, dated April 2007.
- North Bergen Municipal Utilities Authority CSO Long Term Control Plan, Cost & Performance Analysis Report, Volume 1, prepared by Hatch Mott MacDonald, dated March 2007.
- North Bergen Municipal Utilities Authority CSO Long Term Control Plan, Cost & Performance Analysis Report, Volume 2, Technical Guidance Manual, prepared by Hatch Mott MacDonald, dated December 2006.
- North Bergen Municipal Utilities Authority CSO Characterization Study, Final Water Quality and Quantity Monitoring Report, prepared by Hatch Mott MacDonald, dated March 2005.
- North Bergen Municipal Utilities Authority CSO Characterization Study, Supporting Laboratory Data, prepared by Hatch Mott MacDonald, dated March 2005.
- North Bergen Municipal Utilities Authority CSO Characterization Study Group 2 – Dry Weather Water Quality and Quantity Monitoring Report, prepared by Hatch Mott MacDonald, dated June 2003.
- North Bergen Municipal Utilities Authority CSO Characterization Study Group 1 – Dry Weather Water Quality and Quantity Monitoring Report, prepared by Hatch Mott MacDonald, dated March 2003.
- Combined Sewer Overflow Characterization Study, Quality Assurance/Work Plan, for the North Bergen Municipal Utilities Authority, prepared by Hatch Mott MacDonald, dated November 2002.
- North Bergen Township Sewer Mapping and Flow Monitoring Study, prepared by Metcalf & Eddy, December 1992.

Newark:

- City of Newark Department of Water and Sewer Utilities Cost and Performance Evaluation of CSO Control Technologies, March 6, 2008
- City of Newark Department of Water and Sewer Utilities Cost and Performance Evaluation of CSO Control Technologies, March 29, 2007
- Public Participation Report for the City of Newark Department of Water and Sewer Utilities Division of Sewers and Water Supply, March 2007

- City of Newark CSO Long Term Control Plan Cost and Performance Analysis Report Volume 2 – Technical Guidance Manual, December 2006
- Interim Report for the Public Participation Program for the City of Newark Department of Water and Sewer Utilities Division of Sewers and Water Supply, July 2005
- Combined Sewer Modeling Study: Final Report for the City of Newark Department of Water and Sewer Utilities Division of Sewers and Water Supply, April 2005

Harrison:

- Cost & Performance Analysis Report, CSO Long Term Control Plan, Appendix E, prepared by Town of Harrison, dated April 1, 2007.
- Cost & Performance Analysis Report, CSO Long Term Control Plan, Appendix F-1, through F-8, prepared by Town of Harrison, dated April 1, 2007.
- Public Participation Report, prepared by Hatch Mott MacDonald, dated April 2007.

Kearny:

- Town of Kearny, Public Participation Report, prepared by Hatch Mott MacDonald, dated April 2007.
- Town of Kearny, CSO Long Term Control Plan, Cost and Performance Analysis Report, Volume 1, prepared by Hatch Mott MacDonald, dated March 2007.
- Town of Kearny, CSO Long Term Control Plan, Cost and Performance Analysis Report, Volume 2 – Technical Guidance Manual, prepared by Hatch Mott MacDonald, dated December 2006.

East Newark:

- Borough of East Newark Public Participation Report as prepared through the NJ CSO Group, prepared by Hatch Mott Macdonald, dated April 2007.
- Cost & Performance Analysis Report for the Borough of East Newark, prepared by Boswell McClave Engineering, dated March 2007.

Paterson:

- City of Paterson, Public Participation Report, prepared by Hatch Mott MacDonald, dated April 2007.
- City of Paterson, Combined Sewer System, Cost and Performance Analysis, prepared by Schoor DePalma in conjunction with HydroQual, Inc., dated March 2007.
- City of Paterson, Combined Sewer System, Cost and Performance Analysis, Appendix Sections A – E, Appendix Section F (TGM Analysis), CSO Areas 001/003/005/006/007/010/013, prepared by Schoor DePalma in conjunction with HydroQual, Inc., dated March 2007.
- City of Paterson, Combined Sewer System, Cost and Performance Analysis, Appendix Section F (TGM Analysis), CSO Areas 014/015/016/021/022/023/024/025/026, prepared by Schoor DePalma in conjunction with HydroQual, Inc., dated March 2007.
- City of Paterson, Combined Sewer System, Cost and Performance Analysis, Appendix Section F (TGM Analysis), CSO Areas 027/028/029/030/031, Appendix sections G – M, prepared by Schoor DePalma in conjunction with HydroQual, Inc., dated March 2007.
- City of Paterson, CSO Long Term Control Plan, Cost and Performance Analysis Report, Volume 2 – Technical Guidance Manual, prepared by Hatch Mott MacDonald, dated December 2006.

Studies common to multiple facilities (Towns of Harrison and Kearny, Borough of East Newark, and Cities of Newark and Paterson):

- Passaic Valley Sewerage Commissioners Interim Service Area Drainage and Land Use Report for the Towns of Harrison and Kearny, Borough of East Newark, and Cities of Newark and Paterson, Appendix B – Combined Sewer Overflow Drainage Area and Control Information – Towns of Harrison and Kearny, and Borough of East Newark, prepared by Elson T. Killam Associates, dated February 1996.
- Passaic Valley Sewerage Commissioners Interim Sewer System Inventory and Assessment Report for the Towns of Harrison and Kearny, Borough of East Newark, and Cities of Newark and Paterson, prepared by Elson T. Killam Associates, dated February 1996.
- Combined Sewer Overflow Discharge Characterization Study - Final Quality Assurance/Work Plan for the Towns of Harrison and Kearny, Borough of East Newark, and City of Paterson, submitted on behalf of the above municipalities by the Passaic Valley Sewerage Commissioners, prepared by Elson T. Killam Associates, dated November 1997.
- Combined Sewer Overflow Discharge Characterization Study - Final CSO Monitoring Report for the Towns of Harrison and Kearny, Borough of East Newark, and City of Paterson, submitted on behalf of the above municipalities by the Passaic Valley Sewerage Commissioners, prepared by Elson T. Killam Associates, dated April 2002.
- Combined Sewer Overflow Discharge Characterization Study - Final Rainfall Monitoring Study Report for the Towns of Harrison and Kearny, Borough of East Newark, and City of Paterson, submitted on behalf of the above municipalities by the Passaic Valley Sewerage Commissioners, prepared by Elson T. Killam Associates and HydroQual, Inc., dated April 2002.
- CSO Characterization Study – Modeling Report, submitted by the Passaic Valley Sewerage Commissioners on behalf of the Towns of Harrison and Kearny, Borough of East Newark, and the City of Paterson, prepared by HydroQual, Inc., dated December 2003.