



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
COMBINED SEWER OVERFLOWS ANNUAL REPORT

PART I. GENERAL INSTRUCTIONS: The Combined Sewer Overflows (CSO) Annual Report is consistent with the EPA CSO Long-Term Control Policy requiring permitting authorities to report “Measures of Success” of the policy implementation. Hence, the goal of this report is to obtain information regarding:

1. Compliance with the 15 CSO Best Management Practices;
2. The condition and operation of the combine sewer system (CSS) components. Most importantly, the end-of-pipe measures that show trends in the discharge of CSS flows to the receiving water body, such as reduction of pollutant loadings, the frequency of CSOs, and the duration of CSOs;
3. Receiving water body measures that show trends of the conditions in the water body to which the CSO occurs;
4. Overall status of the CSO LTCP, if applicable;
5. Key CSO control accomplishments and design and construction progress in the previous year

Permittee must complete ALL parts of the form and must attach all supporting documents. Please be aware that this annual report form template highlights the minimum requirement a permittee is expected to submit. Permittee is obligated to complete abatement activities to ensure compliance with the Clean Water Act. This report is also consistent with NYS 6 NYCRR 750-2.1(i).

Special Instructions:

1. Multiple permittees (for instance NYC and Albany Pool) responsible to develop a single LTCP can submit one form and also complete Section D of this form.
2. **ALL SECTIONS OF THIS REPORT MUST BE COMPLETED.**

Part II - CSO LTCP Control Information**CSO Facility:** Bird Island Wastewater Treatment Facility**Flow:** 563.00 MGD**SECTION A: CSO LTCP GENERAL INFORMATION**LTCP Development/Implementation:

| | |
|---|---|
| Check all that apply: | <i>Describe other controls currently being used or planned. Also describe how the objectives of the CSO Control Policy have been met.</i> |
| In Development <input type="checkbox"/> | The Buffalo Sewer Authority's Long Term Control Plan was approved by the EPA on March 18, 2014 and is scheduled for completion on March 18, 2034. |
| Submitted <input type="checkbox"/> | |
| Approved <input checked="" type="checkbox"/> | |
| In Progress <input checked="" type="checkbox"/> | |
| Completed <input type="checkbox"/> | |
| Not Required <input type="checkbox"/> | |

CSO Controls:

| | |
|--|---|
| Check all that apply: | <i>Describe other controls currently being used or planned. Also describe how the objectives of the CSO Control Policy have been met under the selected controls</i> |
| Source Controls <input checked="" type="checkbox"/> | The Buffalo Sewer Authority's Long Term Control Plan was approved on March 18, 2014 and incorporates gray infrastructure projects such as weir raising, a floatable control facility, a new relief sewer, in-line storage facilities, CSO in-line storage facilities, upgrades to the existing WWTP and offline storage facilities and green infrastructure projects such as removal of impervious surfaces, pervious pavement, and bio-retention facilities. |
| Collection System Controls <input checked="" type="checkbox"/> | |
| Storage Technologies <input checked="" type="checkbox"/> | |
| Treatment Technologies <input checked="" type="checkbox"/> | |
| Floatable Controls <input checked="" type="checkbox"/> | |
| Disinfection <input checked="" type="checkbox"/> | |
| Type: Chlorination | |

Post-Construction Compliance Monitoring (PCCM) Program:

| | |
|---|---|
| Check all that apply: | <i>Describe PCCM findings, status, updates, and future plan. Attach a separate sheet if necessary and describe if the PCCM confirms that LTCP is meeting the objectives of the CSO Control Policy</i> |
| In Development <input type="checkbox"/> | The Buffalo sewer Authority's Post Construction Monitoring Plan was approved on March 1, 2016. |
| Submitted <input type="checkbox"/> | |
| Approved <input checked="" type="checkbox"/> | |
| In Progress <input type="checkbox"/> | |
| Completed <input checked="" type="checkbox"/> | |
| Not Required <input type="checkbox"/> | |

Part II - CSO LTCP Control Information
SECTION B: OUTFALL INFORMATION

List all existing and active CSO the outfalls. Attach extra sheets, if necessary.

| Outfall # | Latitude | Longitude | Receiving Water/Classification | # of Regulators Associated with this Outfall | Type of Regulator(s) Associated with this Outfall (Fixed Dam, Float / Dynamic, Elevated Pipe, Wet Well Overflow, etc.) |
|-----------|----------|-----------|--------------------------------|--|--|
| 003 | 42.9372 | -78.9072 | Black Rock Canal/C | 11 | Weir & Orifice |
| 004 | 42.9261 | -78.8992 | Black Rock Canal/C | 1 | Leaping Weir |
| 005 | 42.9242 | -78.8908 | Black Rock Canal/C | 2 | Elevated Pipe |
| 006 | 42.9222 | -78.8914 | Black Rock Canal/C | 7 | Weir & Orifice |
| 007 | 42.9222 | -78.9222 | Black Rock Canal/C | 1 | Weir & Orifice |
| 008 | 42.9208 | -78.9000 | Black Rock Canal/C | 1 | Leaping Weir |
| 009 | 42.9189 | -78.9008 | Black Rock Canal/C | 1 | Leaping Weir |
| 010 | 42.9172 | -78.9014 | Black Rock Canal/C | 1 | Leaping Weir |
| 011 | 42.9136 | -78.9033 | Niagara River/ A-Special | 1 | Weir & Orifice |
| 012 | 42.9133 | -78.9019 | Black Rock Canal/C | 1 | Weir & Orifice |
| 013 | 42.8889 | -78.8936 | Buffalo Inner Harbor/C | 1 | Weir & Orifice |
| 014 | 42.8836 | -78.8867 | Erie Basin/C | 2 | Weir |
| 015 | 42.8828 | -78.8853 | Erie Basin/C | 2 | Leaping Weir |
| 016 | 42.8819 | -78.8825 | Erie Basin/C | 2 | Weir & Orifice |
| 017 | 42.8772 | -78.8797 | Buffalo River/C | 20 | Weir, Orifice, Elevated Pipe |
| 022 | 42.8731 | -78.8747 | Buffalo River/C | 4 | Weir, High Pt Sewer, Elevated Pipe |
| 023 | 42.8669 | -78.8681 | Buffalo River/C | 1 | Weir |
| 025 | 42.8642 | -78.8603 | Buffalo River/C | 1 | Weir |
| 026 | 42.8636 | -78.8508 | Buffalo River/C | 44 | Weirs & Leaping Weirs |
| 027 | 42.8633 | -78.8378 | Buffalo River/C | 1 | Weir & Orifice |
| 028 | 42.8606 | -78.8322 | Buffalo River/C | 6 | Weirs & Elevated Pipe |
| 029 | 42.8606 | -78.8322 | Buffalo River/C | 3 | Weir & Orifice |
| 031 | 42.8603 | -78.8247 | Cazenovia Creek/C | 1 | Weir |
| 032 | 42.8619 | -78.8264 | Buffalo River/C | 1 | Leaping Weir |
| 033 | 42.8633 | -78.8258 | Buffalo River/C | 5 | Leaping Weir |

Part II - CSO LTCP Control Information
SECTION B: OUTFALL INFORMATION

List all existing and active CSO the outfalls. Attach extra sheets, if necessary.

| Outfall # | Latitude | Longitude | Receiving Water/Classification | # of Regulators Associated with this Outfall | Type of Regulator(s) Associated with this Outfall (Fixed Dam, Float / Dynamic, Elevated Pipe, Wet Well Overflow, etc.) |
|-----------|----------|-----------|---------------------------------|--|--|
| 035 | 42.8506 | -78.8086 | Cazenovia Creek/B | 2 | Weir & Orifice |
| 037 | 42.8525 | -78.8114 | Cazenovia Creek/C | 1 | Weir |
| 038 | 42.8528 | -78.8111 | Cazenovia Creek/C | 3 | Weir |
| 039 | 42.8536 | -78.8128 | Cazenovia Creek/C | 1 | Leaping Weir |
| 040 | 42.8542 | -78.8128 | Cazenovia Creek/C | 1 | Weir |
| 042 | 42.8553 | -78.8142 | Cazenovia Creek/C | 3 | Weir & Elevated Pipe |
| 044 | 42.8575 | -78.8183 | Cazenovia Creek/C | 4 | Leaping Weir |
| 046 | 42.8589 | -78.8203 | Cazenovia Creek/C | 1 | Leaping Weir |
| 047 | 42.8597 | -78.8228 | Cazenovia Creek/C | 5 | Weir |
| 048 | 42.8606 | -78.8247 | Cazenovia Creek/C | 2 | Weir & Orifice |
| 049 | 42.8617 | -78.8267 | Buffalo River/C | 1 | Weir & Orifice |
| 050 | 42.8556 | -78.8211 | Buffalo River/C | 1 | Weir & Orifice |
| 051 | 42.8619 | -78.8106 | Buffalo River/C | 1 | Weir & Orifice |
| 052 | 42.8650 | -78.8022 | Buffalo River/C | 2 | Weir & Orifice |
| 053 | 42.9239 | -78.8572 | Scajaquada Creek/A | 42 | Weir & Orifice |
| 054 | 42.9519 | -78.9100 | Niagara River/ A-Special | 7 | Weir |
| 055 | 42.9431 | -78.9097 | Niagara River (Cornelius Creek) | 1 | Weir |
| 056 | 42.9350 | -78.8775 | Scajaquada Creek/A | 2 | Weir |
| 057 | 42.9286 | -78.8978 | Scajaquada Creek/A | 1 | Weir |
| 058 | 42.9303 | -78.8958 | Scajaquada Creek/A | 3 | Weir |
| 059 | 42.9308 | -78.8942 | Scajaquada Creek/A | 3 | Weir |
| 060 | 42.9344 | -78.8783 | Scajaquada Creek/A | 12 | Weir |
| 061 | 42.9208 | -78.9003 | Black Rock Canal/C | 1 | Weir |
| 062 | 42.9153 | -78.9019 | Black Rock Canal/C | 1 | Weir |
| 063 | 42.9028 | -78.9019 | Black Rock Canal/C | 1 | Weir |

Part II - CSO LTCP Control Information

SECTION B: OUTFALL INFORMATION

List all existing and active CSO the outfalls. Attach extra sheets, if necessary.

[illegible]

Part II - CSO LTCP Control Information

List all CSO the outfalls that have been closed or separated since LTCP development. Attach extra sheets, if necessary.

[illegible]

Part II - CSO LTCP Control Information

SECTION C: CSO EVENTS, DISCHARGE VOLUME, ETC. Provide an estimate or actual data on overflow events. If necessary, use a separate

| CSO Outfall | No. of overflow events in the previous year | Current**** | Total Annual CSO Volume Discharged (MG) | | Total Annual Volume Captured or Diverted to POTW (MG) | | # of CSO Outfalls | | Indicate Type of Overflow Measurements (e.g. metered, estimated or modeled). If other, please describe |
|-------------|---|-------------|---|-------------|---|-------------|-------------------|-------------|---|
| | | | Baseline** | Current**** | Baseline** | Current**** | Baseline** | Current**** | |
| 003 | 27 | 4 | 4.5 | 0.3 | 0 | 4.1 | 1 | 1 | All flow volumes and event frequencies in this table represent the predicted combined sewer overflows only (excluding stormwater and stream inflows) utilizing the combined system model from the approved Long Term Control Plan. Values for baseline conditions are based on the Modified 1993 Typical Year Precipitation. Current conditions reflect As-Built Data for projects completed to date for conformance with the Administrative Order and design flows for the planned development at RiverBend with precipitation values based on the annual precipitation at the NOAA station at the Buffalo Niagara International Airport. Because two different precipitation data sets are being used, a true comparison of data is not possible. |
| 004 | 8 | 18 | 16.2 | 51.2 | 0 | -35.1 | 1 | 1 | |
| 005 | 4 | 1 | 0.1 | 0.0 | 0 | 0.1 | 1 | 1 | |
| 006 | 65 | 61 | 189.5 | 170.4 | 0 | 19.0 | 1 | 1 | |
| 007* | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 008 | 44 | 33 | 8.2 | 5.2 | 0 | 3.0 | 1 | 1 | |
| 009* | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 010 | 44 | 37 | 11.8 | 11.2 | 0 | 0.7 | 1 | 1 | |
| 011 | 41 | 29 | 132.3 | 130.7 | 0 | 1.6 | 1 | 1 | |
| 012 | 47 | 37 | 71.2 | 55.7 | 0 | 15.4 | 1 | 1 | |
| 013 | 14 | 4 | 13.6 | 10.2 | 0 | 3.4 | 1 | 1 | |
| 014 | 17 | 4 | 26.2 | 8.6 | 0 | 17.6 | 1 | 1 | |
| 015 | 12 | 4 | 5.7 | 1.6 | 0 | 4.1 | 1 | 1 | |
| 016 | 4 | 0 | 0.04 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 017 | 61 | 48 | 90.3 | 44.2 | 0 | 46.2 | 1 | 1 | |
| 022 | 85 | 48 | 39.8 | 17.2 | 0 | 22.6 | 1 | 1 | |
| 023* | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 025 | 11 | 5 | 1.4 | 2.2 | 0 | -0.8 | 1 | 1 | |
| 026 | 75 | 35 | 142.7 | 86.2 | 0 | 56.5 | 1 | 1 | |
| 027 | 38 | 9 | 19.7 | 30.9 | 0 | -11.2 | 1 | 1 | |
| 028 | 73 | 64 | 44.4 | 50.4 | 0 | -5.9 | 1 | 1 | |
| 029 | 0 | 2 | 0 | 0.1 | 0 | -0.1 | 1 | 1 | |
| 031* | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 032 | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 033 | 8 | 5 | 35.9 | 44.5 | 0 | -8.6 | 1 | 1 | |
| 035 | 22 | 0 | 4.8 | 0.0 | 0 | 4.8 | 1 | 1 | |
| 037 | 15 | 16 | 21.2 | 23.6 | 0 | -2.4 | 1 | 1 | |
| 038* | 0 | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 039 | 2 | 0 | 0.0 | 0.0 | 0 | 0.0 | 1 | 1 | |

Part II - CSO LTCP Control Information

SECTION C: CSO EVENTS, DISCHARGE VOLUME, ETC. Provide an estimate or actual data on overflow events. If necessary, use a separate

| CSO Outfall | No. of overflow events in the previous year | Total Annual CSO Volume Discharged (MG) | | Total Annual Volume Captured or Diverted to POTW (MG) | | # of CSO Outfalls | | Indicate Type of Overflow Measurements (e.g. metered, estimated or modeled). If other, please describe |
|-------------|---|---|------------|---|------------|-------------------|------------|---|
| | | Baseline** | Current*** | Baseline** | Current*** | Baseline** | Current*** | |
| 040* | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | All flow volumes and event frequencies in this table represent the predicted combined sewer overflows only (excluding stormwater and stream inflows) utilizing the combined system model from the approved Long Term Control Plan. Values for baseline conditions are based on the Modified 1993 Typical Year Precipitation. Current conditions reflect As-Built Data for projects completed to date for conformance with the Administrative Order and design flows for the planned development at RiverBend with precipitation values based on the annual precipitation at the NOAA station at the Buffalo Niagara International Airport. Because two different precipitation data sets are being used, a true comparison of data is not possible. |
| 042* | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 044 | 15 | 4 | 3.9 | 0 | 2.6 | 1 | 1 | |
| 046 | 9 | 2 | 1.4 | 0 | -0.3 | 1 | 1 | |
| 047 | 47 | 38 | 10.4 | 0 | 2.0 | 1 | 1 | |
| 048 | 14 | 0 | 0.0 | 0 | 1.5 | 1 | 1 | |
| 049 | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 050 | 21 | 14 | 4.0 | 0 | 0.1 | 1 | 1 | |
| 051 | 19 | 4 | 3.7 | 0 | 1.8 | 1 | 1 | |
| 052 | 12 | 9 | 13.6 | 0 | 1.5 | 1 | 1 | |
| 053 | 65 | 61 | 275.0 | 0 | 28.4 | 1 | 1 | |
| 054 | 4 | 0 | 0.1 | 0 | 0.1 | 1 | 1 | |
| 055 | 40 | 33 | 617.8 | 0 | -32.5 | 1 | 1 | |
| 056 | 5 | 4 | 0.0 | 0 | -0.1 | 1 | 1 | |
| 057 | 11 | 0 | 0.3 | 0 | 0.3 | 1 | 1 | |
| 058 | 6 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 059 | 17 | 0 | 5.1 | 0 | 5.1 | 1 | 1 | |
| 060 | 11 | 4 | 2.9 | 0 | 1.1 | 1 | 1 | |
| 061 | 11 | 11 | 34.0 | 0 | 32.1 | 1 | 1 | |
| 062* | 0 | 0 | 0.0 | 0 | 0.0 | 1 | 1 | |
| 063 | 49 | 10 | 1.5 | 0 | 0.7 | 1 | 1 | |
| 064 | 56 | 55 | 26.2 | 0 | 26.2 | 1 | 1 | |
| 066 | 16 | 8 | 2.5 | 0 | -3.3 | 1 | 1 | |
| | 1145 | 721 | 1,886 | 0 | 202.2 | 52 | 52 | |

*These CSOs were excluded from the model due to lack of hydraulic significance and negligible CSO discharge

** 2001 System Conditions with Modified 1993 Typical Year Precipitation Data

*** 2016 System Conditions with 2016 Precipitation Data as Reported at the NOAA station located at the Buffalo Niagara International Airport

Part II - CSO LTCP Control Information**SECTION D: Collection System Information**

| | Baseline | After CSO BMP and/or LTCP Implementation | Current |
|--|----------|--|---------|
| Percentage of the collection system owned by the permittee that is combined. | 93 | 93 | 93 |
| Approximate no. of miles of combined sewers in the permittee owned system | 790 | 790 | 790 |
| Number of combined sewer outfalls in the permittee owned system | 65 | 52 | 52 |
| Average annual no. of CSO events in the permittee owned system | 1145 | 117 | 721 |
| Average annual CSO volume discharged from the permittee owned system (MG) | 1886 | 486.3 | 1684 |
| Population served by the permittee's owned system | 292,648 | 261,310 | 258,071 |
| Number of satellite system connections | 7 | 7 | 7 |

Use the space below to provide any further relevant information on the collection system. This should include a description of any unique ownership, operation and maintenance agreements or further explanation and description of satellite system connections. (Attach extra sheets, if necessary):

Discharges to the Buffalo Sewer Authority's Combined Sewer System from satellite sanitary sewer districts are restricted through inter-municipal agreements, these values were utilized in constructing the flow model for the LTCP:

1. Town of Cheektowaga: 45 MGD
2. Erie County Sewer District #4: 20 MGD
3. Erie County Sewer District #1: 17.82 MGD
4. West Seneca Town Sewer Districts #5, 13, & 14: 12.8 MGD
5. Village of Sloan: 5.18 MGD
6. West Seneca Town Sewer Districts #1,2,3,4,9, & 10: 3.49 MGD
7. West Seneca Town Sewer District #15: 0.39 MGD

Part II - CSO LTCP Control Information

SECTION F: Use this section to describe how the implementation of the LTCP development and implementation have met the water quality standards of the receiving stream(s) and also objectives of the EPA CSO Control Policy (attach extra sheets as necessary):

The approved Long Term Control Plan utilizes a careful balance of traditional gray infrastructure as well as innovative green solutions. The LTCP is the right approach for this community, and although it is financially burdensome, it is designed to protect the environment in the most affordable and cost-effective manner possible. During the development of the LTCP the BSA conducted a careful analysis of detailed receiving stream water quality modeling results. This analysis revealed that a uniform level of CSO control for all BSA receiving water bodies would be neither cost effective nor necessary to meet the established water quality standard (WQS) in each water body in large part due to the extremely varied nature of the CSO receiving waters. The evaluation results showed that the knee of the curve indicates that the approved plan for each receiving water body is designed to provide 100% attainment of the New York State (NYS) recreational WQS. Therefore, the BSA's approved alternative was assembled with a primary focus on providing a cost-effective attainment of the current NYS bacteria WQS in each water body and the associated frequency of activations necessary to accomplish those WQS. This frequency of activation performance measure corresponds to the USEPA CSO Control Policy presumptive approach. Following implementation of the Recommended Plan, based on existing conditions, all water bodies in the BSA system will be positioned to produce less than or equal to 6 events per typical year level of control with the exception of the Niagara River (less than or equal to 9 events per year). The approved LTCP will have a probable project cost of \$380 million and will be implemented over a 20 year period.

SECTION G: Use the following space to summarize other planned CSO control projects (attach extra sheets as necessary):

See the attached BSA Approved CSO LTCP Implementation schedule from the EPA's Amended Administrative Order CWA-02-2014-3033.

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 knowing violations.

| | | |
|--|--|---|
| Name: <u>Dwight A. McPoy, P.E.</u> | Official Title: <u>General Manager</u> | Phone: <u>(716) 851-4664</u> |
| Signature:  | Date Signed: <u>1/30/17</u> | Email: <u>omcpoy@saic.buffalo.ny.us</u> |

PERMITTEE NAME:

Buffalo Sewer Authority

SPDES PERMIT NO.: NY-0028410

PART III - CSO BEST MANAGEMENT PRACTICESCheck N/A if not required in the permit, consent order, or LTCP:

| 1. CSO Maintenance/Inspection 6 NYCRR 750-2.8(a)(2) (EPA NMC: Proper Operation and Maintenance) | YES | NO | N/A |
|---|-------------------------------------|-------------------------------------|--------------------------|
| Is there a written program for the operation, inspection and maintenance of the CSS? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Does the program include procedures for ALL outfalls in the permit? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| Does the program include procedures for ALL regulators in the permit? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Are inspections conducted at least as frequently as required in the permit (weekly or monthly)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Are inspections conducted during dry and wet weather? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Do the inspection reports indicate visual inspection, any observed flows, incidence of rain or snowmelt, condition of equipment, and any work required? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Are inspection reports submitted to the DEC regional office with the monthly operating reports? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Is the written program sufficiently detailed? Indicate which of the following additional components are included in the plan. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pump Stations | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sewer cleaning | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sewer Manholes and Catch Basins | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Outfalls | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| CSO Controls | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there inter-municipal agreements which require inspection and maintenance? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are any changes planned in the upcoming year for the agreements to make them more effective? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is the collection system mapped using GIS? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Entire system, including manholes and catch basins? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the past year, was significant mapping progress accomplished? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| In the upcoming year, is GIS mapping planned? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is the collection system monitored using a SCADA system? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the past year, was significant progress accomplished in installing or expanding monitoring with a SCADA system? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| In the upcoming year, is installation of a SCADA system planned or being expanded? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does the municipality have an asset management plan that includes the collection system? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are funds available to carry out the BMP requirements? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are any major equipment purchases planned or expected in the next five years related to the BMP requirements? If yes, describe below | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the pump inventory, including spare parts, adequate for the upcoming year? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is sufficient staff training available? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

BMP 2 /CSO Maintenance & Inspections

PERMITTEE NAME: Buffalo Sewer Authority

SPDES PERMIT NO.: NY- 0028410

PART III - CSO BEST MANAGEMENT PRACTICES

| | | | |
|---|-------------------------------------|--------------------------|-------------------------------------|
| Is funding for training adequate and available? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | YES | NO | N/A |
| Is sufficient staff training available? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is funding for training adequate and available? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have any work efforts or problems in the past year resulted in changes in overflows? If yes, describe below | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Fewer events | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Less volume | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Reduction in floatables, settleable solids or oil and grease discharged | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Reduction in industrial pollutants (chemicals) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| Improvement in water quality of receiving waterbody | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| In the past year, was the inspection and maintenance program mostly: | | | |
| Reactive (responding to problems) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Proactive (focusing on preventative maintenance to avoid problems)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If the program is mostly reactive, describe below any plans to shift the emphasis to prevention | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary)</p> <p>2016 Improvements:</p> <ol style="list-style-type: none"> 1. Removed approximately 40,000 cubic feet of grit from the Ferry Trunk. 2. Ongoing cleaning and televising in anticipation of milling and paving of roads and streetscape improvement projects. 3. Cleaning and televising of Kelly Island sewers and key locations identified through model recalibration efforts. <p>Planned 2017 Improvements:</p> <ol style="list-style-type: none"> 1. Continue with removal of material from Ferry Trunk. 2. Design of project to prevent clogging of orifice plates and dry weather channels 3. Ongoing proactive and reactive cleaning and televising. 4. Formalized review of operating procedures for sewer maintenance activities. <p>Major equipment purchases:</p> <p>Two new utility trucks were purchased in 2016.</p> <p>A new excavator, 2 receiver cleaning dump trucks, and a televising truck are proposed for purchase in 2017.</p> <p>In 2017 there are plans to incorporate the Bird and Lang RTCs into the SCADA system.</p> | | | |

PART III - CSO BEST MANAGEMENT PRACTICES

| 2. Maximum Use of Collection System for Storage 6 NYCRR 750-2.7(f), 750-2.8(a)(2), 750-2.8(a)(5) (EPA NMC: Maximum Use of Collection System for Storage) | Yes | No | N/A |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Are CSOs minimized, and flow to the treatment plant maximized? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the hydraulic capacity of the system been evaluated? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there a continuous program of flushing and cleaning to prevent deposition of solids? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have regulators and weirs been adjusted to maximize storage without causing service backups? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the past year or the upcoming year, have any changes to structures or procedures been made or planned that will improve use of the collection system for storage? Describe below | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Tidegates maintenance/repairs/replacement | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| FOG program | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Removal of small systems bottlenecks | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Sewer cleaning and sediment removal | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Removal of flow obstructions | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Regulator or weir adjustment - list locations below | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In-line storage: Inflatable dams or sluice gates | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Wet Weather Operating Plan | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Do the municipalities within the combined sewer system have a water conservation program for homeowners? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the upcoming year are there any studies, work, or projects planned (other than routine activities) to improve use of collection system for storage? Describe below. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary) 2016 Improvements: 1. Begin construction of Smith St. Real Time Control (RTC) and SPP modifications to reduce CSO events at CSO 026. 2. Completion of the Bird and Lang Avenues RTCs to utilize existing capacity to reduce CSOs to CSO 053 and 004. 3. Continued development of remaining RTC projects. 4. Impervious surface reductions in association with the City of Buffalo's demolition program. 5. Green Infrastructure projects in conjunction with City of Buffalo's street reconstruction projects. 6. Removed approximately 40,000 cubic feet of grit from the Ferry Trunk. Planned 2017 Improvements: 1. Continue with removal of grit from Ferry Trunk. 2. Commencement of engineering for WWTP Improvements Project-Alternative C2. 3. Design of project to prevent dry weather overflows due to clogging of orifice plates and dry weather channels. 4. Complete construction of Smith St. RTC and SPP modifications. 5. Continue development of remaining RTC projects with both construction and engineering planned. | | | |

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| 3. Industrial Pretreatment 6 NYCRR 750-2.7(f) and 2.9(a)(4) (EPA NMC: Review and Modify Pretreatment Requirements) <input type="checkbox"/> N/A | YES | NO | N/A |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| Has the impact on CSOs from nondomestic users that discharge toxic pollutants been evaluated, and steps taken to minimize such impacts? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there an approved pretreatment or mini-pretreatment program? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If there is no pretreatment or min-pretreatment program, are there any nondomestic users? If No to both of the previous questions, go to BMP 4 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Is there an inventory of industrial dischargers? Is the following information included? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Volume of discharge? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pollutants in discharge? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are any pollutants classified as "persistent toxics" or bioaccumulative? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is the location included on the collection system map? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there any industrial discharges that could reach CSO outfalls? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If yes, have any industrial dischargers been identified as contributing to a water quality impairment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If yes, does the industry have a holding tank or EQ tank to store wastewater prior to discharge to the collection system? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If yes, does the industry have a written plan to store or hold discharges during rain events? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If yes, has the industry been asked to prepare a written plan to store or hold discharges? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| In the past year, have there been negotiations or changes to agreements with industrial dischargers which will potentially reduce impacts during CSO events? Describe below. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the upcoming year, are any negotiations or changes to agreements with industrial dischargers planned which will potentially reduce impacts during CSO events? Describe below. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary)</p> <p>Negotiations throughout 2016 in regard to the SolarCity project located at the Riverbend site on South Park Avenue have sought to reduce any impact of industrial discharges during CSO events including limiting the allowable scheduled discharges during storm events and limiting the composition of discharges from the site.</p> <p>Industrial dischargers who violate their permits are cited by the Buffalo Sewer Authority and are required to come into compliance or face revocations of their permits. Permits are reviewed and renewed with any changes required to comply with EPA and NYSDEC regulations incorporated into the new permit on a three year cycle. All permits which expire in the next year will be reviewed for compliance with 40 CFR Part 403 and sewer use rules, regulations and laws.</p> | | | |

PART III - CSO BEST MANAGEMENT PRACTICES

| 4. Maximize Flow to POTW 6 NYCRR 750-2.7(f), 2.8(a)(2), and 2.8(a)(5) (EPA NMC: Maximum Flow to POTW for Treatment) N/A | <input type="checkbox"/> | YES | NO | N/A |
|--|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| In the past year, were the headworks, primary treatment works and disinfection works able to pass the flows specified in the permit for all wet weather flows? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the past year, was the secondary treatment works able to treat the flows specified in the permit for all wet weather flows? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If the answer to either of the above questions was No, has a plan and schedule to accomplish this been submitted to the Department? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| In the past year have there been any physical modifications to the collection system which have allowed more flow to reach the POTW? Describe below. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are any physical modifications planned for the upcoming year? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there areas of the collection system, including pump stations that need additional study to evaluate capacity, condition, or to determine if illegal connections (i.e. inflow) exist? List below | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the past year, have any new problem areas been identified that restrict flow to the plant? List locations below | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the upcoming year, are there plans to address hydraulic restrictions or bottlenecks? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pipe replacement | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Construction of relief sewer | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Construction of overflow tank | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pump station improvements | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pump replacement | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Weir adjustment | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Smoke testing, dye testing to identify illicit connections | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE

MINIMUM CONTROLS. (Attach extra sheet if necessary)

2016 Improvements:

1. Begin construction of Smith St. Real Time Control (RTC) and SPP modifications to reduce CSO events at CSO 026.
2. Completion of the Bird and Lang Avenues RTCs to utilize existing capacity to reduce CSOs to CSO 053 and 004.
3. Commencement of engineering for WWTP Improvements Project-Alternative C2.
4. Continued development of Hamburg Drain Optimizations and remaining RTC projects.
5. Impervious surface reductions in association with the City of Buffalo's demolition program.
6. Green Infrastructure projects in conjunction with City of Buffalo's street reconstruction projects.
7. Removed approximately 40,000 cubic feet of grit from the Ferry Trunk.
8. Ongoing cleaning and televising in anticipation of milling and paving of roads and streetscape improvement projects.
9. Cleaning and televising of Kelly Island sewers and key locations identified through model recalibration efforts.

Planned 2017 Improvements:

1. Continue with removal of material from Ferry Trunk.
2. Commencement of engineering for WWTP Improvements Project-Alternative C2.
3. Design of project to prevent clogging of orifice plates and dry weather channels.
4. Complete construction of Smith St. RTC and SPP modifications.
5. Ongoing proactive and reactive cleaning and televising.

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PART III - CSO BEST MANAGEMENT PRACTICES

| 5. Wet Weather Operating Plan (WWOP) 6 NYCRR 750-2.8(a) (EPA NMC: None) <input type="checkbox"/> N/A | YES | NO | N/A |
|--|-------------------------------------|-------------------------------------|--------------------------|
| Has a WWOP been developed, specifying procedures for unit operations, to maximize treatment during wet weather events while not diminishing effluent quality or destabilizing treatment upon return to dry weather operation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the past year, did treatment of wet weather flows cause any effluent violations or destabilize treatment upon return to normal service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Has the WWOP been developed in accordance with the DEC guidance, "Wet Weather Operating Practices for POTWs with Combined Sewers"? If no, describe changes needed. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the WWOP been submitted to the Regional Office and Bureau of Water Permits (Albany) for review and approval? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If the collection system or plant has been modified or upgraded, has the WWOP been modified to reflect new flow rates or new procedures? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If yes, has the revised plan been submitted to the Regional Office for approval? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Does the plan identify the maximum flows through preliminary, primary, secondary treatment, tertiary, and disinfection units? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the upcoming year, are changes to the plan expected? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary) The Wet Weather Operating Plan was submitted to the NYSDEC in September 2007 and an updated version was submitted in May 2007. The Primary Bypass Improvements Project was completed in 2014 and the Wet Weather Operating Plan was updated to reflect changes associated with the distribution of wet weather flow through the WWTP that have resulted from this project and submitted to the NYSDEC Regional Office. | | | |

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| 6. Prohibition of Dry Weather Overflows 6 NYCRR 750-2.7 and 2.8(b)(2) (EPA NMC: Eliminate Dry Weather Overflows) N/A | <input type="checkbox"/> | YES | NO | N/A |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| In the past year, were there any dry weather overflows? If no, skip to BMP 7. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Were all dry weather overflows reported in accordance with 6 NYCRR Part 750-2.7 (incident reporting)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If dry weather overflows occurred, indicate which procedures or equipment have been improved or replaced | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Schedule for routine inspections | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Management, operation and maintenance program | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Modification of existing or issuance of new inter-municipal agreements | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| FOG program | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Removal of illicit connections | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I/I Control program | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Leaky tidegates | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Adjustment and/or repair of regulators | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pumps | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Auxiliary power | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Elimination of hydraulic bottlenecks | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Adequate dry weather flow capacity at the treatment plant | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other, list below | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has additional staff training been provided? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the likelihood of future dry weather overflows been eliminated? If not, describe additional information below. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary) | | | | |

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PART III - CSO BEST MANAGEMENT PRACTICES

| 7. Control of Floatables and Settleable Solids 6 NYCRR 750-2.8(a)(4) <i>(EPA NMC: Control of Solid and Floatable Materials in CSOs)</i> | <input type="checkbox"/> N/A | YES | NO | N/A |
|--|------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| In the past year, were did any outfalls discharge floating solids, oil and grease, or solids of sewage origin? | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have BMPs been implemented to eliminate or minimize the discharge of floatables and settleable solids? | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have any of the following measures been implemented (either existing from previous years, in the past year) or will any be implemented in the upcoming year? If significant progress has been made in implementing these, or if significant improvements have occurred, describe below. | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Floatables quantification | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Booming and skimming of open waters | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Source controls (street cleaning, public education, household hazardous waste collection, solid waste collection, recycling, and/or composting of lawn/leaf/roadkill deer) | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In-line netting | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Screens | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Catch basin hoods | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other: | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are any changes needed or planned for the upcoming year? Describe additional information below. | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary)</p> <p>Floatables captured by the Hamburg Drain Floatable Control Facility are quantified prior to disposal.</p> <p>Hoods have long been installed on catch basins within the Buffalo Sewer Authority's combined sewer system.</p> <p>Booming of significant outlets and source controls (See BMP 12 for more details) have also been implemented for some time within the Buffalo Sewer Authority's jurisdiction.</p> | | | | |

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| 8. Combined Sewer System Replacement 6 NYCRR 750-2.10(i) (EPA NMC: None) <input type="checkbox"/> N/A | YES | NO | N/A |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| In the past year, were any combined sewers designed or constructed that were not approved by DEC? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If yes, was the combined sewer replaced by separate sanitary and storm sewers to the greatest extent possible? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| If yes, were the separate sanitary and storm sewers designed and constructed simultaneously but without interconnections to the maximum extent practicable? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Is the combined portion of the collection system completely identified on maps or GIS? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there any plans or current projects to separate combined sewers into sanitary and storm sewers? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is there an approved engineering plan for this project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| In the past year, how many areas of combined sewer were separated? 0.0 acres | | | |
| In the upcoming year, how many areas of combined sewer are scheduled to be separated? 0.0 acres | | | |
| Are the sewer replacement projects on schedule? If no, describe below. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Overall, has the implementation of this BMP resulted in fewer overflow events and/or less volume discharged? Describe below. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary)</p> | | | |

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| 9. Combined Sewer Extension 6 NYCRR 750-2.10(i) (EPA NMC: None) <input type="checkbox"/> N/A | YES | NO | N/A |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| In the past year, were any combined sewers extended not using separate sewers? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Were sanitary and storm sewers extensions designed and constructed simultaneously but without interconnections? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Were any new sources of stormwater added to a separate sewer anywhere in the collection system? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If separate sewers were extended from combined sewers, was it demonstrated that the sewerage system had the ability to convey, and the treatment plant had the ability to adequately treat, the increased dry-weather flows? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If determined necessary by the Regional Water Engineer, was an assessment made of the effects of the increased flow of sanitary sewage or industrial waste on the strength of CSOs and their frequency of occurrence, including the impacts upon best usage of the receiving water? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has a recent combined sewer extension resulted in increased discharge from a CSO? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Has a recent combined sewer extension resulted in increased flow to the POTW? Describe any CSO impacts below. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is any development planned upstream of a combined sewer? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If yes, has a sewer extension plan been submitted for review and approval? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If the approval contained a flow credit requiring removal of I/I, what was the requirement or ratio? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the plan include any flow retention structures? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE**MINIMUM CONTROLS.** (Attach extra sheet if necessary)

Currently planned development upstream of the combined sewer system involves primarily private connections to the existing Buffalo Sewer Authority public combined sewer system. These private developments are subject to NYSDEC review for downstream capacity only; downstream capacity is determined by metering of dry weather flows and calculation of proposed flows based on the NYS Design Standards for Intermediate Sized Wastewater Treatment Systems, 2014. Public sewer extensions are submitted for full approval to the Erie County Health Department as agent for the NYSDEC for approval.

As part of the Buffalo Sewer Authority's sewer tap permitting process for storm discharges, new development which involves a soil disturbance of 0.25 acres or more which are upstream of or discharge directly to the combined sewer system detain/retain on site post-construction flows during a 25 year storm in excess of pre-construction flows during a 2 year storm. New development which disturbs 0.25 acres or more of soil and discharges downstream of a regulator or directly to the MS4 system must comply with the post-construction standards as outlined in GP-0-15-002.

In the case of Riverbend, a significant increase in dry weather flow is anticipated with a nominal impact on wet weather overflows.

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| 10. Connection Prohibitions 6 NYCRR750-2.9(a)(5) (EPA NMC: None) <input type="checkbox"/> N/A | YES | NO | N/A |
|---|--------------------------|-------------------------------------|-------------------------------------|
| In the past year, were any sewer connections approved, in spite of a notice from DEC to prohibit further connections due to documented, recurrent instances of sewage backing up into house(s) or discharges of raw sewage onto the ground surface from surcharging manholes? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Are new connections prohibited by the DEC? If no, skip to BMP 11. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is this due to basement backups? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is this due to surcharging manholes? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| In the upcoming year, is any work planned to either increase capacity or reduce hydraulic loading? Describe below. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary)</p> | | | |

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| 11. Septage and Hauled Waste 6 NYCRR750-2.7(f) and 2.8(a)(1) (EPA NMC: None) <input type="checkbox"/> N/A | YES | NO | N/A |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| In the past year, has there been any discharge or release of septage or hauled waste into the collection system upstream of a CSO? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Does the facility have authorization from DEC to accept hauled waste or septage at a location other than the POTW? Describe below. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Are any of these locations upstream of a CSO? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Are there any agreements with haulers to accept waste at a location other than at the POTW? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| In the past year, was any hauled waste or septage accepted at a location other than at the POTW? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| What was the total volume received at locations other than the POTW? 0.0 MGD | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Is there a dedicated location to discharge septage at the POTW? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are there restrictions on when the plant accepts hauled waste or septage? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Have there been any changes to the POTW's policy on septage and hauled waste in the past year? Are any changes needed or planned in the upcoming year? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary) | | | |

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| 12. Control of Run-off 6 NYCRR750- 2.1(e) (EPA NMC: None) <input type="checkbox"/> N/A | YES | NO | N/A |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| Is sediment in runoff from construction zones entering catch basins in the combined sewer system? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is there adequate communication between the local municipal department that enforces local stormwater codes and ordinances and the collection system staff regarding stormwater runoff? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Do the municipalities within the combined sewer system have adequate storm water pollution prevention programs to reduce pollutants in stormwater? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Annual household hazardous waste collection | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Autumn leaf collection | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Lawn clippings | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Christmas tree pickup | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Roadkill deer composting | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Fertilizer and pesticide management | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Enforcement of litter laws | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Public education programs on composting | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are any changes needed in the implementation of this BMP to reduce the number of CSO events, the volume discharged, or pollutants in the discharge? If yes, describe below. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary)</p> <p>The Buffalo Sewer Authority under MS4 Permit #NYR20A461 is regulated as a non-traditional MS4. As such those projects which involve the disturbance of one acre or more of soil and which discharge to sewers that drain directly to the waters of the United States rather than potentially draining to the WWTF are subject to NYSDEC SPDES General Permit for Construction Activity Permit No. GP-0-15-002. This includes routine inspection of construction sites for compliance with the permit. For those sites with 0.25-1.0 acre of soil disturbance, a sediment and erosion control plan is created, however inspections are only conducted upon receipt of a complaint.</p> <p>For areas of the Buffalo Sewer Authority's system which discharge upstream of or directly to the combined sewer system, construction projects are restricted in final peak flow which could be discharged to the sewer thereby reducing the peak flow input into the combined sewer system and allowing flows to potentially reach the WWTF for treatment rather than discharging through CSOs. In addition to the post-construction flow standards, for sites with 0.25-1.0 acre of soil disturbance, a sediment and erosion control plan is created. Inspections in these cases are only conducted upon receipt of a complaint. For sites of 1 acre or more weekly inspections are conducted by the owner/operator and the BSA verifies these inspections on a routine basis. However, it is expected that sediment is still entering the system through smaller construction sites or between inspections.</p> <p>Regarding road kill deer, the City of Buffalo has not traditionally had an issue with road kill deer. When smaller road kill animals are reported, the Buffalo Animal Shelter transports the carcasses to the Erie County SPCA for incineration. Due to safety and health risks associated with a large decaying animal in a high density population center it is expected that a road kill deer would be disposed of promptly.</p> | | | |

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| 13. Public Notification 6 NYCRR 750-1.12 (EPA NMC: Public Notification) <input type="checkbox"/> N/A | YES | NO | N/A |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| Have identification signs been installed and maintained at all CSO outfalls owned and operated by the permittee? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are all signs placed at or near the outfall? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the signs easily readable by the public? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the signs a minimum size of 18" by 24"? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Do the signs have white letters on a green background? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Do all the signs contain the following information: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| SPDES permit number | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Outfall number | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Permittee name, contact name and phone number at business office or NYSDEC Division of Water regional contact address and phone number | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| For waters that are Class B or higher, is a public notification program implemented to inform citizens of the location and occurrence of CSO events? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does this program include a mechanism (public media broadcast, standing beach advisories, newspaper notice, etc) to alert potential users of the receiving waters affected by CSOs? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does this program include a system to determine the nature and duration of conditions that are potentially harmful to users of these receiving waters due to CSOs? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Were there any problems in the past year with missing or damaged signs? Describe below. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Is there a written public notification plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the plan list all methods used to notify the public of CSO events? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the plan list outfalls where signs are posted? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <p>DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS. (Attach extra sheet if necessary)</p> | | | |

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| 14. Characterization and Monitoring (6 NYCRR 750-1.11(a), 2.5(a) and 2.7(g)) (EPA NMC: Monitoring) | YES | NO | N/A |
|--|-------------------------------------|-------------------------------------|--------------------------|
| If required in the permit, has the combined sewer system been characterized to determine the frequency of overflows, and identify CSO impacts? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Was a baseline sampling program established as part of the LTCP development? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Are all outfalls monitored during discharge events for: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Flow Volume: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Frequency: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Duration: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| If all outfalls are not monitored, explain how sufficient data is obtained to document the success of the BMPs. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| List locations of rain gauges or the source of data, below. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has a Post Construction Modeling and Monitoring plan been submitted to the Department for review and approval? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the Department approved the Post Construction Modeling and Monitoring plan? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Has post construction monitoring and modeling of the receiving water begun? Attach results if this has not already been provided. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

DESCRIBE BELOW HOW THIS BMP IMPLEMENTATION HAS MET THE REQUIREMENTS OF THE SPDES PERMIT, AND THE OBJECTIVES OF THE EPA NINE

MINIMUM CONTROLS. (Attach extra sheet if necessary)

Extensive characterization and metering were undertaken during the development of the Buffalo Sewer Authority's Combined Sewer Overflow Long Term Control Plan. As many of the BSA's CSO outfalls are submerged and/or have separate storm sewer connections downstream of regulators, CSO outfall monitoring is achieved through bimonthly inspection of regulators. A system-wide hydraulic model was developed using flow meters and level gauges which is used to estimate CSO activation frequency and volume and a water quality model which can predict pollutant impacts based on a "Modified Typical Year" which has been reviewed and approved by the regulating agencies. In calibrating the metering data to the "Modified Typical Year" twelve rain gauges were installed throughout the City of Buffalo at Public School 66 (North Drive and Cunard), Public School 81 (Delaware and Tacoma), West Hertel Elementary (Hertel Avenue), Public School 60 (Ontario Street), Cazenovia Park (Tosh Collins Community Center), Colonel Ward Pumping Station (Foot of Porter Avenue), U.S. Coast Guard Station (Fuhrmann Boulevard), the Buffalo Sewer Authority's metering station at Lafayette Street, the Police Station at Glenwood and Main Street, the City Department of Public Works Garage (Burbank and Delaware Park) and the National Weather Service gauge at the Buffalo Niagara International airport. The post-construction monitoring plan was submitted before March 18, 2015 and a response to comments regarding the plan was submitted in December 2015. In accordance with this plan, recalibration of the model is scheduled to occur between March 18, 2016 and March 18, 2018. Work is currently slightly behind schedule with recalibration completion estimated to occur by June 30, 2018. Data collection is currently under way.

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| 15. Annual report 6 NYCRR 750-2.1(i) <input type="checkbox"/> N/A (EPA NMC: None; Required in LTCP permit) | YES | NO | N/A |
|--|-------------------------------------|--------------------------|-------------------------------------|
| Is this report being used to satisfy BMP 15, Annual report, and the BMP checklist? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is existing documentation of implementation of the BMPs included? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is this annual report submitted by January 31 to the Regional Office and the Bureau of Water Permits (Albany)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Attach any additional information necessary to document the implementation of BMPs in the past year or list plans for the upcoming year. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall, was implementation of the BMPs effective in controlling and minimizing CSO discharges? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| If no, list any improvements needed that have not been described elsewhere | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | |

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ADDITIONAL INFORMATION:

DESCRIBE BELOW IN DETAIL OTHER "MEASURE OF SUCCESS" ABOVE AND BEYOND THE REQUIREMENTS OF THE SPDES PERMIT. DESCRIBE HOW ADDITIONAL PROJECT(S) HAS HELPED TO MEET THE OBJECTIVES OF THE EPA NINE MINIMUM CONTROLS POLICY. (Attach extra sheet if necessary)

PERMITTEE NAME: _____

SPDES PERMIT NO.: NY- _____

PART III - CSO BEST MANAGEMENT PRACTICES

SECTION D: For Multiple Permittees Only

| Permittee Name | SPDES Permit Name | SPDES Permit No |
|----------------|-------------------|-----------------|
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PART III - CSO BEST MANAGEMENT PRACTICES

SECTION E: GLOSSARY/ACCRONYMS

For the purposes of this annual report, the following terms and acronyms are described below:

Baseline: Conditions before the development and/or implementation of CSO BMPs and/or LTCP.

Best Management Practice (BMP): Permit condition used in place of or in conjunction with effluent limitations to prevent or control the discharge of pollutants. May include schedule of activities, prohibition of practices, maintenance procedure, or other management practice. BMPs may include, but are not limited to, treatment requirements, operating procedures, or practices to control plant site runoff, spillage, leaks, sludge or waste disposal, or drainage from raw material storage.

Bypass: A discharge of wastewater, stormwater, or combination of both, around a treatment unit designed for the removal of pollutants.

Catch Basin: A chamber usually built at the curblin of a street, which admits surface water for discharge into a storm drain

Collection System: A wastewater collection system which conveys sanitary wastewaters (domestic, commercial and industrial wastewaters) and stormwater through a single pipe to a publicly owned treatment works for treatment prior to discharge to surface waters.

Combined Sewer: A sewer designed to carry wastewater and stormwater runoff.

Combined Sewer Overflows (CSO): A discharge of untreated wastewater from a combined sewer system at a point prior to the headworks of a publicly owned treatment works. CSOs generally occur during wet weather (rainfall or snowmelt). During periods of wet weather, these systems become overloaded, bypass treatment works, and discharge directly to receiving waters.

Combined Sewer System (CSS): A wastewater collection system that conveys sanitary wastewaters and storm water through a single pipe to a publicly owned treatment works for treatment prior to discharge to surface waters.

Demonstrative Regulatory Approach: Control approach where a permittee develops and implement an LTCP that meets the state water quality standards. A permittee could develop an LTCP that would provide for attainment of water quality standards, or it could use a total maximum daily load (TMDL) to *demonstrate* that water quality standards can be attained through a combination of CSO controls and other controls.

EPA: Environmental Protection Agency

EQ Tank: Equalization Tank often used to smooth hydraulic peaks to a POTW or WWTP.

Fats Oil & Grease (FOG)

Geographic Information System (GIS) is a computer-based tool for mapping and analyzing features in the environment. GIS support a wide range of activities including water quality modeling, watershed planning, and wetlands permitting and mitigation.

GI: Green" Infrastructure

Infiltration/Inflow (I/I): Rainwater, snowmelt, or groundwater flowing into separate sanitary or combined sewers, typically introduced via connected roof downspouts and/or building footing drains or infiltrating into the pipe through cracks in the pipe walls or joints.

This Period: Period covering the last 12 months from January to December

Last Period: Activities covering the 12 calendar months prior to the end of the current period

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Long Term Control Plan (LTCP): An engineering document that characterizes and assesses CSO discharge to a receiving waterbody. The goal of the Plan is to comply with the water quality standards of the receiving waterbody.

Million Gallons per Day (MGD) is a unit of flow commonly used for wastewater discharges. One mgd is equivalent to 1.547 cubic feet per second.

Multiple Permittees here is described as when a group of permittees (e.g. Albany Pool) is responsible to develop a single LTCP or when a single LTCP is required for multiple SPDES permit under a single permittee (e.g. NYC).

Nine Minimum Controls (NMC) provide information on nine minimum technology-based controls that permittees are expected to use to address CSO problems, without extensive engineering studies or significant construction costs, before long-term measures are taken.

NYSDEC: New State Department of Environmental Conservation (interchangeably uses as DEC)

Publicly Owned Treatment Works (POTW): Also commonly referred to as "treatment facility, WWTP (Wastewater Treatment Plant)

SPDES Permit: State Pollutant Discharge Elimination System Permit. A permit issued by DEC, authorized under the federal Clean Water Act, to discharge treated wastewater to waters of the United States.

Overflow Events: An event starts once an overflow starts from an outfall, and ends once the overflow stops and the pumpback to treatment facility have ended.

Presumptive Approach: The presumption approach is based on the assumption that an LTCP that meets certain minimum defined performance criteria. The "presumption approach," under which achievement of certain performance criteria (i.e., 4-6 untreated overflow events or 85 percent by volume capture) would be presumed to provide an adequate level of control to attain water quality standards

Raw Sewage: Untreated sanitary sewage.

Sanitary Sewer Overflow (SSO) is an untreated or partially treated sewage discharge from the sanitary sewer collection system.

Separate Sewer (SS): A pipe or conduit intended to convey only sanitary sewage to a wastewater treatment facility.

SPDES: State Pollutant Discharge Elimination System

Sewer System: A public or privately owned wastewater collection facility designed and used to convey or treat sanitary sewage or sanitary sewage and storm water. Sewer system does not include an on-site wastewater treatment system serving one residential unit or duplex.

Supervisory Control and Data Acquisition (SCADA) is a complex computer system that provides automatic control of stormwater storage and overflows at various locations within the sewer system.

Volume Discharged: Total discharge volume for the event (in millions of gallons) from each CSO outfall within this reporting period.

Volume Captured: Total discharge volume for the event (in millions of gallons) that were either captured via an offline treatment facility before discharge or diverted to the WWTP for treatment.

WWOP: Wet Weather Operating Plan

Water Quality Standards (WQS) are regulations that establish the uses for which surface waters of the state are protected and include numeric and narrative criteria to protect those uses.