

**New York State Department of Environmental Conservation**

**Division of Water**

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Joe Martens  
Commissioner

January 14, 2015

SENT VIA EMAIL

Mr. Keith Beckmann, P.E.

Program Manager - LTCP

Bureau of Wastewater Treatment

New York City Department of Environmental Protection

96-05 Horace Holding Expressway

Corona, NY 11368

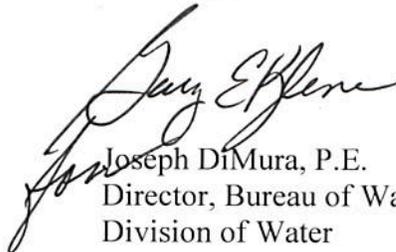
Re: Order on Consent ("CSO Order"), DEC Case #CO2-20110512-25 modification to DEC Case #CO2-20000107-8, Appendix A  
IX. Westchester Creek CSO, G. Submit Approvable Drainage Basin Specific LTCP for Westchester Creek

Dear Mr. Beckmann:

The New York State Department of Environmental Conservation (Department) acknowledges receipt of the letter dated November 24, 2015 from the New York City Department of Environmental Protection (City) that provided responses to the Department's comment letter dated September 22, 2015. The Department's final comments on the Westchester Creek LTCP are provided in Attachment A. Please respond to these comments within 45 days of the date of this letter.

If you have any questions regarding this letter, please contact Mr. Gary E. Kline, P.E., Section Chief at 518-402-9655 or [gekline@gw.dec.state.ny.us](mailto:gekline@gw.dec.state.ny.us).

Sincerely,



Joseph DiMura, P.E.  
Director, Bureau of Water Compliance  
Division of Water

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## ATTACHMENT A

1. Executive Summary
  - a. In Table ES-4, include a footnote to clarify that the “Baseline Condition” is also the selected alternative.
  - b. Table ES-4 and ES-5 both list sample point E11, but it appears the sample point should be E13.
2. Section 1
  - a. In Section 1.2.d, the LTCP states that adoption of the Green Infrastructure Plan resulted in elimination of some grey infrastructure, which is not correct. The changes made to the CSO Order 2012 did not reflect a tradeoff between green and grey infrastructure and the LTCP must be revised to reflect this fact.
3. Section 2
  - a. Sections 2.1.c.2 and 2.2.a.6 summarize the field data for Westchester Creek obtained during recent sampling effort, however, the City did not submit an approvable sampling plan in advance of this sampling effort. If the City includes these data within the LTCP, then it must also provide a Data Usability Assessment Report in an appendix to the LTCP. The Department again requests that the City submit a sampling plan in advance of starting the sampling for the waterbodies where the City is planning to conduct sampling for the LTCPs. The City shall also provide all available data from the sampling efforts to the Department.
  - b. In Table 2-3, include in a separate column the average annual flows for each stormwater outfall for the year 2008.
  - c. In Tables 2-4 and 6-1, include the stormwater concentrations used for HP-839 as discussed in the City’s November 24, 2014 letter.
  - d. The City’s November 24, 2014 letter include a 2005 memo from HydroQual that provided the basis for the stormwater concentrations that have been used in the InfoWorks model. However, according to the memo, the City eliminated several data points that represented very high levels of bacterial load in some of the stormwater discharges. The Department recognizes that the analysis of stormwater data was completed almost a decade ago, and the results have been incorporated into all of the InfoWorks model analysis to date, however, in principle, the Department believes that data points should not be excluded from an analysis unless there is a verified basis for doing so. Given this lack of verification and the considerable variability in the stormwater concentrations from the 2004 sampling program, the Department’s reiterates its position that the City should continue to characterize its stormwater on an ongoing basis. Moreover, the City should be continuously updating the analysis of stormwater concentrations presented in the 2005 HydroQual memo with more recent stormwater data, such as data from the Hutchinson River sampling effort. Incorporating more data into these analyses should increase the level of confidence in the model results.
  - e. Figure 2-8 presents the fecal coliform and enterococci concentrations from the sampling of CSO outfalls HP-014 and HP-016, however, according to the data provided to the Department in the file “Westchester Raw data for DEC May, 14,

2014”, one data point for HP-016 had a count of bacteria of over 2 million cfu/100 ml. This data point does not appear to be included in Figure 2-8 and should be included to accurately to assess concentrations of CSO.

- f. In Section 2.1.c.6, provide a current status of construction or equipment conditions at the Hunts Point WWTP and in particular, confirm that ongoing construction has no impact on hydraulic capacity of the treatment plan.
- g. Section 2.2.a.2 describes the characteristics of the waterbody, but does not discuss odors. If Information is available on the odors within the waterbody, especially at the head end, at low and high tides, it should be provided. If no data are available on odors in this waterbody, the City should consider conducting an odor study.
- h. Discuss somewhere in Section 2 whether or not the houseboats located on Westchester Creek are connected to the City’s sewer system.

4. Section 4

- a. Figure 4-3 should include a more legible illustration of the parallel sewer for Pugsley Creek.

5. Section 6

- a. Revise Section 6.2 to clearly indicate if the LTCP will use the mass balance approach or the Monte Carlo method for calculating pollutant loads for CSO, as discussed in the City’s November 24, 2014 letter.
- b. Section 6-2 give the fractions of sewage in the overflows calculated in the IW model to range from 3.8% to 18%, please explain the reason for the wide range..
- c. Per the discussion between the Department and City on January 12, 2015, revise the performance gap analysis to assess performance against the 30-day rolling GM for enterococci of 30 cfu/100ml and STV of 110 cfu/100ml. Provide the results from the performance gap analysis using these Future Primary Contact WQ Criteria.
- d. Table 6-11 should also indicate the number of rainfall events included in each “bin”.
- e. Section 6.2 states “As DEP has moved the program forward, it has been determined that monitoring of CSO overflow quality is required at key locations and sampling sanitary concentrations in the combined sewer lines is also required to develop a better database that can be used to improve the accuracy of the CSO loadings”. The Department agrees with the need for additional monitoring and requests that the City include stormwater and direct runoff in the monitoring plan as well to ensure all sources of adequately pollutants are characterized. The sampling plan should be reviewed and approved by the Department.

6. Section 8

- a. In Section 8.1.a (as well as other sections, e.g. Section 7.3), the LTCP states that there are no performance gaps for the baseline conditions to attain the current Class I water quality standards, however, Sections 6.3.a and 9.4 clearly indicate that the dissolved oxygen standard is not fully attained under the baseline conditions. The discussion of performance of the Westchester Creek alternatives and cost – attainment analysis must also consider attainment of dissolved oxygen standard.
- b. On page 8-27, the DEP states that the extension of a force main from the Throgs Neck PS to the Hunts Point WWTP will have adverse impacts on the Hutch River and

- Bronx River, however, the detailed discussion of this alternative on pages 8-6 et seq. do not mention any adverse impacts. Please provide more information on the adverse impacts.
- c. Section 8.1.i states that dredging was eliminated because there are no exposed CSO sediments within Westchester Creek. To substantiate this claim, the City should provide a figure with the current bathymetry of the waterbody and elevations at low tide.
  - d. In Table 8-5, footnote 1 states that the floatables control and Bronx River siphon enhancement will be evaluated under the Citywide LTCP, but it should read “Bronx River LTCP”.
  - e. Section 8.2.a.2 states that a future analysis of a Bronx River siphon will be conducted under the Bronx River LTCP, and consist of a third barrel next to the existing two barrels. Given the preliminary results for this alternative presented in the Westchester Creek LTCP, it seems that there will be very little CSO reduction from this alternative for the Bronx River and East River, and it is likely due to the complex hydraulics of the sewer system immediately upstream of the existing siphons. As such, for the Bronx River LTCP, the City shall also evaluate construction of a siphon under the Bronx River and parallel interceptor/force main further upstream in the sewershed, such as at Regulators 27, 26, 25, and 13 or Metcalf Avenue pump station that would create a new conveyance line directly to the Hunts Point WWTP.
  - f. In Section 8.2.a.3, the City eliminated the floatables control without providing any detailed discussion on the magnitude of floatables present within Westchester Creek or the evaluation of other control technologies, such as underflow baffles, or baffle boxes (see e.g. <http://www.suntreetech.com/Products/Nutrient+Separating+Baffle+Box/default.aspx>) . The evaluation of alternatives must provide a more detailed discussion of existing floatables and control options.
  - g. The City’s November 24, 2014 letter provided a justification for elimination of Green Infrastructure as a viable alternative for the LTCP. Although the response provides some additional information, it could be further developed and provide information on the extent and depth to bedrock for the watershed, etc. However, in the interest of expediting the revisions to this LTCP, the Department will not request any additional discussion on GI in this LTCP, but requests that for future LTCPs for other waterbodies, that the City provide a more detailed justification for eliminating GI as the preferred alternative if that occurs.
  - h. Figure 8-2 indicates that the size of the dewatering pump station for in-line storage is 509 MGD, however Table 8-2 indicates that the pump station would be 3 MGD. Reconcile the discrepancy.
  - i. In Table 8-5, include the number of overflow events for each of the alternatives considered.
  - j. Per the discussion between the Department and City on January 12, 2015, the Time to Recover analysis should be conducted for the August 15 design storm for the point of compliance of WC1 for the selected alternative using the fecal coliform single sample standard of 1000 cfu/100ml only. Table 8-12 can be deleted from the LTCP.
  - k. Per the discussion between the Department and City on January 8, 2015, eliminate the site specific standards from the LTCP but include a general discussion on the spatial

and temporal extent of non-attainment with water quality standards within the waterbody during period of analysis.

7. Section 9

- a. In Section 9.2, provide a more detailed discussion of the implementation schedule for the Green Infrastructure. The schedule merely indicates that the GI will be implemented by 2030.
- b. In Section 9.5, provide a reference to Section 4.3 which provides a more in-depth discussion of the post-construction compliance monitoring program.