New York State Department of Environmental Conservation

Division of Water

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September 22, 2014

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 on June 30, 2014 of the Westchester Creek Long-Term Control Plan (LTCP) submitted by the New York City Department of Environmental Protection (City) pursuant to the CSO Order. The Department conducted a preliminary review of the LTCP and determined that it cannot make a determination on the completeness or approvability of the LTCP until the City provides additional information and clarifications as outlined in Attachment A.

The Department requests that the City provide the requested information and clarifications within 60 days of the date of this letter. The Department reserves its right to provide more detailed comments after a comprehensive review of the LTCP which will follow receipt of the City's submittal of information in response to this letter. If the City would like to discuss the comments contained herein prior to submitting its formal response, the City must contact the Department to do so in a timely manner to ensure the 60 day deadline will be met.

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.

Sincerely,

Joseph DiMura, P.E.

Director, Bureau of Water Compliance

Division of Water

cc: All sent via email

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ATTACHMENT A

- 1. Pollutant Concentrations and Loads. The LTCP includes several inconsistencies and information gaps with respect to the pollutant concentrations used in the modeling and the estimated pollutant loads. First, the stormwater pollutant concentrations used for the Westchester Creek LTCP differ from and are much higher than those used for the Alley Creek LTCP. In particular, the Westchester Creek LTCP uses a fecal coliform concentration of 120,000 cfu/100 ml and an enterococci concentration of 50,000 cfu/100 ml, while the Alley Creek LTCP uses a fecal coliform concentration of 35,000 cfu/100 ml and an enterococci concentration of 15,000 cfu/100 ml, yet the same technical references for the pollutant concentrations are provided for both LTCPs. If the City is relying on the same technical source for the concentration, it is not clear why there are differences in pollutant concentrations. The City must explain the technical basis for the pollutant concentrations used and whether these concentrations represent mean, median, or maximum values. Second, the City includes an outfall for highway runoff HP-839, which is the largest stormwater outfall within the watershed but the bacterial pollutant loads of runoff from highways may be different than other impervious surfaces. The City must explain the technical basis for determining the pollutant concentrations for this outfall. Third, the total pollutant loads for stormwater presented in Table 6-2 do not appear to be consistent with the component analysis load presented in Tables 6-9 and 6-10, with the component loads appearing to be higher than would be expected given the total loads in Table 6-2. In particular, the annual GM and maximum winter months indicate very high stormwater bacterial loads relative to CSO bacterial loads. The City must explain in more detail how the component analysis is developed and how it corresponds to the total pollutant loads. Fourth, Section 6.1.c states that Sentinel Monitoring did not indicate any illicit sanitary sewer connections within the Westchester Creek sewershed, but the LTCP modeling assumed an illicit load for calibration purposes and then excluded the loads from the baseline conditions. The inclusion of these illicit sources is not supported by the field samples and seems to introduce some inaccuracy into the model. The City must explain in more detail why there is a discrepancy between the field data and calibrated model and the rationale for including an illicit load contrary to the field data. Fifth, Section 6.2 (as well as Section 2.1.c.1) states that the calculated bacteria concentrations from model appear to be higher than the concentrations obtained from the 2014 field sampling of Westchester Creek CSOs but does not provide an adequate explanation for the discrepancy. The City must explain in more detail why the calculated and observed concentrations may differ.
- 2. Waterbody Segmentation and Recommended Water Quality Targets. The LTCP includes limited information on the rationale for segmenting the waterbody and selecting site specific water quality targets in the LTCP. The City must explain in more detail the rationale for segmenting the waterbody into inner and outer areas for purposes of establishing recommended site specific water quality targets. In particular, the City should explain the reasons for selecting Norton Avenue as the demarcation between the inner and outer areas and also discuss whether the inner creek segment can be reduced such that the portion of the waterbody subject to lower water quality targets can be minimized and the portion of the waterbody subject to more stringent targets can be maximized. The City should also explain how the site specific targets presented in Table 8-11 were established. Given the levels of attainment for the fecal coliform standard during the recreational season shown in Table 6-6 and

the maximum summer month fecal coliform concentrations shown in Table 6-9, it would seem that a lower site specific standard could be established for the inner creek segment. Lastly, to provide an alternate approach for evaluating the performance gap and attainment levels, the City shall conduct the following analyses:

- a. Using the 10 years of baseline rainfall data and excluding data from the 24-hour time wet weather advisory periods after each rainfall event, determine the percent of time the waterbody is in attainment with the existing water quality standards, primary contact water quality standards, and future primary contact water quality standards for the baseline conditions/selected alternative.
- a. Using the 10 years of baseline rainfall data, determine the percent of time the water-body is in attainment with fecal coliform levels of 200 cfu/100 ml, 300 cfu/100 ml, 400 cfu/100 ml, 500 cfu/100 ml, and 600 cfu/100 ml for each of the water quality sampling points (e.g. WC2, WC1, WC3, E13) for the baseline conditions/selected alternative. Along similar lines, evaluate the percent of time the waterbody is in attainment with enterococci levels various increments from 35 org/100 ml to 300 org/100 ml for each sampling point for baseline conditions/selected alternative.
- 3. Evaluation of Alternatives. The LTCP included limited information on the evaluation of some alternations. The City must provide results for the knee of the curve analysis for the inline storage, in-line storage plus disinfection, and green infrastructure alternatives as well as Treatment Shaft (see attached AET brochure) and other technologies identified in the EPA document: http://water.epa.gov/scitech/wastetech/upload/Chapter-4 Mar-2013 508.pdf.