March 16, 2017

SENT VIA EMAIL

Mr. Keith Mahoney, P.E.
Acting LTCP Program Manager
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
Section IV.A.2, City-Wide Green Infrastructure Implementation, Green Infrastructure Performance Metrics Report
Section IV.A.3, City-Wide Green Infrastructure Implementation, Green Infrastructure Contingency Plan

Dear Mr. Mahoney:

The New York State Department of Environmental Conservation (Department) completed a review of the Green Infrastructure Contingency Plan and Green Infrastructure Metrics Report submitted by the New York City Department of Environmental Protection (City) on June 27, 2016 and June 30, 2016, respectively. The Department's comments are provided in Attachment A. The Department requests that the City provide a written response to the comments within 60 days of the date of this letter. If the City would like to discuss the comments contained herein prior to submitting its formal response, please 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 Kline, P.E., Section Chief at 518-402-9655 or gary.kline@dec.ny.gov.

Sincerely,

[Signature]

Joseph DiMura, P.E.
Director, Bureau of Water Compliance
Division of Water
cc: All sent via email
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Attachment A

Green Infrastructure Metrics Report

1. The GI Metrics Report indicates that the future implementation of GI assumes a much greater share of detention based GI projects than have been or will be implemented under the 1.5% application rate because the City does not have site specific information for future GI installations. As such, the Department recommends that the City conduct a sensitivity analysis that assumes a range for the future GI in terms of percent retention vs. detention practices, from 0 to 100 percent, for the remaining 8.5% application rate, and then estimate the associated CSO reductions. This approach would result in a range for the CSO reductions for the 8.5% rate.

2. The City should continue to gather data for source control projects associated with the Stormwater Performance Standard for new development and redevelopment areas as well as other programs that could be accounted for and added to the GI goals for total CSO reduction in the future.

3. Section 4.4, the wording of the 4th paragraph is confusing. Also in Section 4.4, last paragraph, the City indicates that the infiltration rates for future GI are based on average values for nearby constructed ROWBs. Confirm if the City also uses soil maps when estimating infiltration rates for future ROWBs.

4. Confirm if the City includes evapotranspiration for modeling the blue/green roofs, which would reduce the amount of stormwater that enters the sewer system.

5. Describe how the City will incorporate a decline in performance of the GI over time due to normal wear and tear of the practices. Although the City will be conducting routine maintenance of the GI, it would be reasonable to assume performance of the GI practices will not remain the same as when first constructed.

6. Describe how the City will incorporate sewer infiltration associated with implementation of retention GI practices. If the City does not have any data on sewer infiltration, it would seem reasonable to gather additional field data to support modeling of long-term GI performance.

Green Infrastructure Contingency Plan

1. Table 3 provides an overview of the work DEP plans to complete to meet the 1.5% application rate, but the Department needs more detailed information on the projects that will be constructed to meet the 1.5% rate. To satisfy the consent order requirements, the area wide contract/project groups need to be broken down into specific projects (can be grouped with drainage basins or sub-catchments) with their status (% complete if in construction) and location, detailed implementation schedules, and contribution to the overall 1.5% application rate.