May 9, 2017

Dear Ms. Levine:

This letter provides clarification to the New York City Department of Environmental Protection (City) with respect to the Department’s March 7, 2017 approvals under the CSO Order, of the Long-Term Control Plans (LTCP) for Alley Creek, Flushing Bay, Flushing Creek, Bronx River, and Hutchinson River. The Department provides the following clarifications to the approval letters for the aforementioned LTCPs.

1. **Implementation Schedules for LTCPs Selected Alternative.** The milestones included in the Department’s approval letters were directly based on the proposed timelines taken from the LTCPs submitted by the City. The LTCPs provide that the City will initiate design activities upon their approval by the Department. The Department recognized in the approval letters that implementation schedules may change as the City proceeds with the detailed design of the selected alternatives and gains a better understanding of the nature of the work to be completed, and this revision was anticipated in the LTCP approval letters.

The Department recognizes that the Hutchinson River and Flushing Creek disinfection projects may be issued as either one or two design contracts. Regardless of the number of
contracts issued, they should not impact the current or future design or construction dates as presented in the LTCPs approved by the Department by letters dated March 7, 2017. The Department would only consider a request to modify the proposed schedules once the City has completed the 30% basis of the design for the projects. A 30% design including progress on site acquisition and the ULURP process would provide both the Department and City a higher level of confidence in the projected timeframes for completion of the work. Once a level of higher confidence is reached, project schedules might be accelerated or extended based on an appropriate level of engineering design.

2. **Performance Criteria for Disinfection Facilities.** The performance criteria presented in the LTCP approval letters were based on the analysis completed by the City to evaluate the operation and effectiveness of the disinfection facilities, as well as industry standard for these types of facilities. The LTCP approval letters do not impose these performance criteria as effluent limits. To support the development of its disinfection facilities, the City conducted extensive research on a large number of similar CSO disinfection facilities around the country and determined that these facilities were capable of readily achieving up to a 4-log reduction of bacteria while still meeting total residual chlorine limits ranging from 0.1 mg/L to 1.0 mg/L, with few exceptions. The modeling completed by the City for disinfection facilities selected for Alley Creek, was based on achieving a 2-log reduction of bacteria while still maintaining a target maximum concentration of total residual chlorine of 0.1 mg/L through the addition and operation of dechlorination facilities. The City’s 2014 approved Alley Creek LTCP states on page ES10 that:

   “Recreational Season Disinfection Operation in Existing Alley Creek CSO Retention Facility, will need to address potential effluent toxicity from total residual chlorine (TRC). Therefore, DEP sought a balance to reduce a high level of human or CSO-derived bacteria while protecting the waterbodies from TRC. A potential operational strategy was developed and incorporated into Alternative 4. The disinfection facilities would be operated during the recreational season to achieve a targeted 2-log bacteria kill (99 percent) while seeking to produce a minimum discharge of TRC to the extent possible. Consistent with the majority of the surveyed operating CSO disinfection facilities around the country, the effluent TRC in the Alley Creek CSO Retention Facility is expected to have a maximum concentration of 0.1 mg/L.”

Given the degree of engineering, modeling and industry review completed by the City for the Alley Creek LTCP, the Department’s LTCP approval concurred with this performance criteria and furthermore believed it appropriate to equally apply the criteria at proposed City CSO disinfection facilities recommended by LTCPs. The Department has relied on the Alley Creek LTCP and the City’s Best Professional Judgment that the prescribed performance criteria and operational strategy set forth in the LTCP approval letters is commensurate with what has been achieved by other municipalities and is reasonable. Failure by the City to achieve the performance criteria despite the City’s best engineering efforts, will result in the City’s need to do more to address the impacts of CSOs and or residual chlorine on the waterbodies.
If you have any questions, please feel free to call me at (518) 402-9503

Sincerely,

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Deputy Counsel

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