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Daniel O'Connor
Village Engineer
Municipal Building
One Van Wyck Street
Croton-on-Hudson, NY 10520

January 31, 2022

Re: The Hudson National Golf Course – Stop Monitoring at selected stations and analytes

Dear Dan:

The purpose of this letter is to recommend the cessation of monitoring for total phosphorus (TP) and cessation of all monitoring at SW-5 at the Hudson National Golf Course.

The core five years of 'official' operational monitoring began with the "satisfactory completion of all drainage systems and water quality basins" (TSG, 2000). The HNGC satisfied the completion of that condition on August 31, 1999 (Ioannou, 2002). Therefore, the core five years of operational phase monitoring at HNGC ended August 31, 2004 for pesticides that had not exceeded response thresholds (RTs) as described in the EMP. Monitoring continues today for nitrate-nitrite nitrogen (N-N) and TP as the result of RT exceedances in surface water at four on-site stations and one off-site station.

Monitoring has continued for N-N and TP at five remaining on-site surface water stations (SW-1, -3A, 4, and -5) and one off-site station, SW-6. All monitoring will stop at the HNGC following the completion of the monitoring requirements in accordance with the 2000 EMP (as amended) for N-N and TP. Due to the occurrence of RT exceedances for N-N and TP at the on-site stations at different times during the year and different years the schedule to stop monitoring is staggered accordingly. Currently, N-N monitoring is scheduled to stop in 2026 at stations SW-1 and SW-3A; 2023 at SW-4; and 2021 at SW-5. Monitoring at the off-site station SW-6 will continue until all on-site monitoring stops.

Monitoring for total phosphorus (TP) could have stopped at SW-5 in 2014, at SW-4 in 2017, and SW-1 in 2018, and in 2021 at SW-3A in accordance with the EMP. We continued to monitor TP at all stations because the cessation timing at the on-site stations were staggered and it did not take much extra effort in labor or analytical costs to monitor that parameter. Even though there was a slight TP RT exceedance two times at one station (SW-1, RT 0.23 ppm)

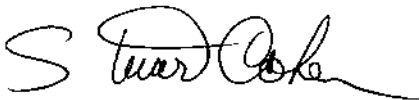
during 2021 (0.25 ppm in August and 0.24 ppm (average of duplicate samples 0.11 and 0.37 ppm) in November), both results were only slightly above the RT. In addition, there was a huge difference in the duplicate turbidity sample results (>3X) during the November sampling event and they were analyzed outside of the 48 hr holding time, which may have affected the TP results. Finally, TP monitoring should have stopped in 2018 at SW-1.

We recommend that all total phosphorus monitoring stop at all four on-site stations and at the off-site station SW-6 in accordance with the EMP. In addition, we recommend that monitoring for N-N stop at only station SW-5 in accordance with the EMP. Monitoring for N-N will continue at three on-site stations SW-1 (through 2026), SW-3A (through 2026), and SW-4 (through 2023), and at the off-site station SW-6 (as long as monitoring on-site continues) in accordance with the EMP. If N-N RTs are exceeded at these stations the 5-yr monitoring starts again.

If you have any questions, please let us know.

Thank you,

LaJan and Stuart

Handwritten signature of LaJan Barnes in cursive script.Handwritten signature of Stuart Cook in cursive script.

cc: Brett Scales, HNGC