



MEMORANDUM

TO: Kevin McManus, Cappelli Organization

PROJECT NO.: 10785

FROM: Sesi Consulting Engineers

DATE: July 12, 2019

SUBJECT: Summary of Environmental Testing, Centre Avenue Development Southern and Northern Lots

Between June 19, 2019 and July 1, 2019, Sesi performed a geotechnical and environmental investigation program. Sesi collected soil samples for environmental testing on the 100'x100' southern lot, currently in the BCP program, and the 100'x150' northern lot which is not in the BCP program, as part of the proposed Centre Avenue Redevelopment to be located in New Rochelle, NY. Sesi collected samples of both the fill and decomposed rock layers on each site with, a total of four composite and 10 discreet samples from the southern lot and a total of eight discreet samples from the northern lot. A summary of the environmental testing is provided below.

Southern Lot - BCP Area

The samples collected in this lot were analyzed for TCL/TAL+30. Exceedances to the NYSDEC soil cleanup objectives (SCOs) were detected in all four of the composite samples including SB-17 Comp, SB-18 Comp, SB-19 Comp and SB-20 Comp. The pesticides 4,4'-DDD and 4,4'-DDT were detected above the unrestricted use soil cleanup objectives in the composite sample collected from boring SB-17. The metals lead and zinc were also detected above the unrestricted use SCO in SB-17. The poly-aromatic hydrocarbons (PAHs) benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene were detected above the unrestricted use and the restricted residential SCOs in sample SB-18 Comp. The pesticides 4,4'-DDE, 4,4'-DDD and 4,4'-DDT were detected above the unrestricted use SCO and the metals barium and lead were detected above the restricted residential SCOs in sample SB-18 Comp. Sample SB 75.1-19 Comp showed 4,4'-DDT, barium, lead and zinc were detected above the unrestricted use SCOs. Copper, nickel and zinc were detected in sample SB-20 Comp above the unrestricted use SCOs.

Exceedances to the restricted residential SCOs detected in the weathered bedrock include sample B8E1 8FT (nickel and mercury). Exceedances to the unrestricted SCOs in the weathered bedrock include sample B7E1 9FT (nickel), sample B9E1 9ft (copper and nickel) and sample B8E1 8ft (copper).

Based on the results of the soil samples collected from the BCP area, the highest soil contamination levels were in the area of SB-18 with PAHs and metals detected above the restricted residential SCOs. Pesticides and other metals were above the unrestricted SCOs, but below the restricted residential SCOs in the remaining samples. It is unlikely that any of the soil samples are RCRA hazardous because of the relatively low concentrations of contaminants.

These results are similar to the results of the soil samples collected in December 2017 in the BCP area with the exceedances to the unrestricted and restricted residential SCOs, consisting of metals and PAHs. The results of soil samples collected from the northwest portion of the BCP site in December 2017 were also similar to the most recent results with the exception of the VOCs trichloroethene (TCE) detected above the unrestricted and 1,4-dioxane detected above the restricted residential.

Based on the results above exceedances were found in 3 of the 4 samples obtained in the decomposed rock. We believe that the decomposed rock will likely be eligible for the BCP program.

Northern Lot - Non-BCP Area

Grab soil samples SB-11 Grab (5.5), SB-12 Grab (6), SB-13 Grab (7), SB-15 Grab (3.5) and SB-16 Grab (7) were collected in the 100'x 150' area which is not currently in the BCP area. Soil sample SB-11 Grab (5.5) showed PAHs, pesticides, lead and nickel above the unrestricted use SCOs but not the restricted residential SCOs. Sample SB-12 Grab (6) contained 4,4'-DDT and lead above the unrestricted use SCO. Sample SB-13 (7) contained lead above the unrestricted SCO only. Sample SB-15 (3.5) contained pesticides and mercury above the unrestricted use SCOs, but not the restricted residential SCO and barium and lead above the restricted residential SCOs. The pesticides 4,4'-DDE and 4,4'-DDT were detected in sample SB-16 Grab (7) above the unrestricted SCO only. Volatile organic compounds were not detected above any of the SCOs.

Exceedances to the unrestricted SCOs in the weathered bedrock were detected in sample B-5A,S1,12' (copper), B-2,S4,11' (nickel) and B-3,S-4,11' (nickel).

Based on the results of the soil samples collected from area not in the BCP, barium and lead are present in the soil above the restricted residential SCO. The other exceedances detected were all above the unrestricted use SCOs. It is unlikely that any of the soil samples are RCRA hazardous because of the relatively low concentrations of contaminants.

Based on the results of the environmental laboratory testing program for the Northern Lot, SESI would recommend additional testing in order to gather additional data to determine if this site will be BCP eligible.

Drum Samples

The results of the TCLP metals and RCRA characteristics analysis for the drum samples W Lot Comp and E Lot Comp indicated that these samples were not hazardous.