



MEMORANDUM

To: Syosset Central School District
From: Walden Environmental Engineering, PLLC
Date: June 26, 2020
Subject: Reports Released by NYSDEC on June 25, 2020

On June 25, 2020, the New York State Department of Environmental Conservation (NYSDEC) released a Brownfield Cleanup Program Fact Sheet entitled *Site Investigation Report Recommends Cleanup of Brownfield Site (Site No. C130002, Syosset Park Lots 251 & 252)*, along with the following reports:

- *Syosset Landfill Radiological and Emerging Contaminant Sampling Summary and Assessment*
- *Remedial Investigation Report for the Syosset Park Lots 251 & 252 (Former Cerro Wire Site)*

Syosset School District (District) requested that Walden Environmental Engineering, PLLC (Walden) evaluate the data and information presented in these documents and advise whether the findings and conclusions raised any concerns for the District, in particular South Grove Elementary School, based upon Walden's review of the reported information. Please note that the Remedial Investigation Report (RIR) for the Former Cerro Wire Site is an extensive document containing over 10,000 pages of text and data; therefore, Walden is continuing to review the RIR and will provide a detailed analysis of the RIR to the District under separate cover.

Based upon our review of the information contained in the *Syosset Landfill Radiological and Emerging Contaminant Sampling Summary and Assessment* (Syosset Landfill Report), there is nothing in this report that would indicate that groundwater at the former Syosset Landfill poses hazardous conditions or health concerns to South Grove Elementary School. Similarly, NYSDEC's Brownfield Cleanup Program Fact Sheet (Brownfield Fact Sheet) states that the former Cerro Wire site does not pose a significant threat to public health or the environment; however, cleanup has been determined necessary to satisfy the stringent requirements of the Brownfield Cleanup Program.

Syosset Landfill Groundwater Sampling

In 2018, NYSDEC collected groundwater samples from monitoring wells at the former Syosset Landfill as part of a sampling program, which included many former landfills and Superfund sites



across the State. The investigation details and sampling results are presented in the Syosset Landfill Report.¹ The Landfill groundwater samples were analyzed for emerging contaminants [including 1,4-dioxane and Per- and Polyfluoroalkyl Substances (PFAS) including PFOA and PFOS] and radiological compounds (including the naturally occurring isotopes radium-226 and radium-228). The groundwater samples at the former Syosset Landfill were collected from a depth of approximately 115 feet below the land surface, in the Upper Glacial Aquifer.

Samples collected from seven (7) on-site monitoring wells were analyzed for emerging contaminants. The emerging contaminant concentrations detected in the Landfill groundwater samples from five (5) of the seven (7) wells exceed the State's proposed drinking water standards (Maximum Contaminant Levels or "MCLs") for these compounds (10 parts per trillion PFOA/PFOS and 1 part per billion 1,4-dioxane). Walden notes that, in recent years, these emerging contaminants have been widely found in Long Island groundwater; therefore, drinking water suppliers are installing treatment systems to ensure that drinking water quality continues to meet the applicable MCLs.

The radiological groundwater sampling results presented in the Syosset Landfill Report indicate that certain naturally occurring radiological compounds were detected at concentrations slightly above the applicable MCLs in groundwater samples from three (3) of the ten (10) monitoring wells tested.^{2,3} The Syosset Landfill Report further states that the detected concentrations are consistent with background levels typically found in Long Island groundwater, indicating that the Ra-226 and Ra-228 detected in the samples are naturally occurring.

Walden's previous evaluation of the District's December 2018 indoor radon sampling results for South Grove Elementary School concluded that the results were well below the 4 picocuries per liter EPA action level, confirming that indoor air quality at the school is not impacted by radon. Walden's radon evaluation and our review of the data from the Landfill radiological sampling

¹ It is noted that the Syosset Landfill Report does not include laboratory analytical reports for the monitoring well samples analyzed for emerging contaminants and radiological compounds. It would be prudent to request copies of these laboratory reports to verify the data tabulated in the report.

² Note that radiological analysis was performed on eleven (11) groundwater samples which were collected from 10 monitoring wells, plus one duplicate groundwater sample (SY-3X) collected from monitoring well SY-3D. The Syosset Landfill Report does not discuss the duplicate sample collection and instead inaccurately states that groundwater samples were collected from eleven (11) monitoring wells. This discrepancy can be verified by reviewing the laboratory reports.

³ A discrepancy was noted in the SY-1D monitoring well total depth recorded on the Groundwater Sampling Sheets for October 11, 2018 and October 29, 2018, as presented in Appendix A of the Syosset Landfill Report. This requires further clarification.



included in the Syosset Landfill Report indicate there is no evidence of impacts from the Landfill with respect to radiological compounds. Based on Walden's review of the Syosset Landfill Report, the emerging contaminant and radiological groundwater sampling results indicate that groundwater at the Landfill does not pose environmental or health impacts on the District, in particular South Grove Elementary School.

Walden further notes that there is no exposure to any of the compounds present in the groundwater samples collected at the former Syosset Landfill, given the 100+ foot depth to water and the fact that drinking water is supplied from the far deeper Magothy aquifer (over 200 feet below grade) in this area. In addition to continuing to evaluate the USEPA post-closure groundwater monitoring results for the Syosset Landfill, the District may opt to perform periodic sampling of the permanent monitoring wells installed at South Grove Elementary School to track on-site groundwater quality and evaluate potential impacts in the future.

Former Cerro Wire Brownfields Remedial Investigation

Walden is continuing to review the extensive RIR and will provide a detailed analysis to the District under separate cover.

In the interim, we note that the Brownfield Fact Sheet states that the Remedial Investigation Report (RIR) for the Former Cerro Wire Site summarizes the site investigation results and recommends development of a cleanup plan to address contamination found at the site. The Brownfield Fact Sheet also states that NYSDEC has determined that the site does not pose a significant threat to public health or the environment. According to NYSDEC, the next step is development of a Remedial Work Plan for the former Cerro Wire site; the draft Remedial Work Plan will be released by NYSDEC for public review and comment. NYSDEC advised that it will keep the public informed throughout the investigation and cleanup of the site.

Walden Environmental Engineering, PLLC