

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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SHAWN M. LATOURETTE

Commissioner

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Governor

SHEILA Y. OLIVER

Lt. Governor

May 25, 2022

Honorable John McCormac Office of the Mayor Woodbridge Township One Main Street Woodbridge, NJ 07095

RE: Colonia High School Investigation

Dear Mayor McCormac:

Thank you for engaging the Department of Environmental Protection (DEP) in the evaluation of potential environmental health concerns in the vicinity of Colonia High School. In collaboration with the state Department of Health, Woodbridge Township officials, and independent experts, DEP has completed its review of potential environmental exposures related to the occurrence of primary brain tumors. As summarized herein, the evaluation at and in the vicinity of Colonia High School has not identified any source of environmental exposures and, based on available information, no further environmental testing or remediation is required by DEP.

Radiological Investigation

At the Township's request, the DEP Bureau of Environmental Radiation provided technical assistance in the course of the Radiological Investigation of Colonia High School commissioned by the Township.

On April 1, 2022, DEP reviewed the proposed investigation plan and, subsequently, a quality assurance and quality control plan, as well as radiation instrument calibration certificates. DEP found the plan acceptable to determine the radiological status of the high school and its grounds.

On May 23, 2022, DEP received the draft final Radiological Investigation Report for review. DEP has now completed its review and determined that a thorough survey of the radiological status of the high school building and grounds was performed. DEP concurs with the conclusion of the report that all survey results are consistent with normal background radiation found in New Jersey, which varies widely from location to location based on underlying geology, ground cover, building materials, and cosmic radiation.

Based on the data presented, DEP has determined that there is no indication that radiation at Colonia High School deviates from the normal variability of background radiation typical in New Jersey, and no further radiological testing is required.

In addition to the investigation of the radiological status of the high school, the Township also contracted a DEP certified radon measurement business to determine the radon levels in indoor air levels at the school. Radon is a naturally occurring radioactive gas commonly associated with incidences of lung cancer.

A DEP certified measurement technician deployed 83 radon testing devices at the high school following DEP approved guidance for testing large buildings and schools. One device was found in a location different than where it had been originally placed, and therefore deemed invalid, which is not unusual when testing large buildings with many detectors. The radon in air guidance level is 4 picocuries per liter (pCi/L). A pCi is a measure of radioactivity from radon and its decay products. All samples collected at the high school were below 4 pCi/L. One sample, collected from the stage in the auditorium, was above 2 pCi/L. All other samples were below 2 pCi/L. The average reported indoor radon levels across Middlesex County is 2.08 pCi/L. As radon levels are below 4 pCi/L, no further radon testing or remediation is required.

Additional Environmental Review

Although radiation is the most likely environmental factor associated with the occurrence of primary brain tumors, in an abundance of caution, DEP conducted a comprehensive review of available environmental health indicators in the vicinity of the high school. This included a review of naturally occurring radioactive deposits, historic land use, and hazardous site contamination records at and within a one-mile radius of the high school.

In the course of this review, DEP did not identify any likely sources of environmental exposures at or impacting the high school. Based on available information, no further testing of environmental media at the high school grounds is required.

Conclusion

In conclusion, the results of the radiological investigation at the high school and grounds are within the normal variation of background radiation levels in New Jersey and are therefore not indicative of concern over radiological exposure to individuals at the site. In addition, DEP's further review does not indicate sources of environmental exposures of concern to public health. Accordingly, no further testing or remediation is required or recommended at this time.

My DEP colleagues and I thank the Township and its consulting experts for their partnership in evaluating this matter and welcome you to contact us with any further questions or concerns.

Sincerely,

Shawn M. LaTourette

Commissioner

Department of Environmental Protection

c: Commissioner Judith M. Persichilli, RN, BSN, MA New Jersey Department of Health

