

RI Department of Health Three Capitol Hill Providence, RI 02908-5097

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January 31, 2023

The Honorable Daniel J. McKee Governor, State of Rhode Island State House 82 Smith St., Room 115 Providence, RI 02903

The Honorable K. Joseph Shekarchi Speaker of the House State of Rhode Island State House 82 Smith St., Room 323 Providence, Rhode Island 02903

The Honorable Dominick J. Ruggerio Senate President State of Rhode Island State House 82 Smith St., Room 318 Providence, Rhode Island 02903

RE: The Permanent Air Quality Monitoring Act

Dear Governor McKee, Speaker Shekarchi, and Senate President Ruggerio:

Chapter 1-7 of the Rhode Island General Laws establishes the *Permanent Air Quality Monitoring Act*, which requires the Rhode Island Airport Corporation (RIAC) to design, acquire, install, operate, and maintain a long-term air-quality-monitoring program in the vicinity of T.F. Green Airport. Under § 1-7-9:

(a) On or before January 31, 2017, and on or before January 31, 2018, and January 31, 2019, thereafter, the department of environmental management, the department of health, and the attorney general shall submit to the governor, the speaker of the house, and the president of the senate, recommendations as to the continuation of the air monitoring required in this act.

(b) Unless extended by the general assembly, the corporation's obligation to operate and maintain the air monitoring system will cease on July 31, 2023; provided, this sunset date shall be dependent upon the corporation undertaking and completing the following actions prior to July 31, 2023.

Accordingly, I write to update you on the status of the work set forth under the *Permanent Air Quality Monitoring Act*. The lack of resources, particularly staff, at the Rhode Island Department of Health (RIDOH) has made it challenging for RIDOH to compile a complete report on the most recent year's data. In amendments to the Act, enacted in 2017, the Rhode Island General Assembly requested that monitoring assess the impact of the runway extension on the nearby neighborhood. Under § 1-7-9, the enacted amendment states:

(b) (1) As part of the long-term air-quality monitoring program, ambient air-quality monitors shall be set up in a network that shall include at least four (4) monitoring sites in the area of and surrounding Rhode Island T.F. Green International Airport. These monitors shall be designed, placed, and maintained so as to measure air-quality impacts from airport operations, including those impacts associated with planes operating on the extended runway and on neighborhoods adjacent to the airport facility, and at the Winslow Park playing fields. In addition to the quarterly summary reports prepared by the corporation based on this data, the (Rhode Island Airport Corporation aka RIAC) shall compile at least twenty (20) months of complete air quality monitoring data from these monitors and submit that data to the department of health prior to May 1, 2023, pursuant to § 1-7-6.

A location on Smith Street, just south of the end of the main runway, was selected as the new site for the equipment that had been previously located at the fire station northwest of the airport. RIAC installed the sensors to monitor black carbon and particle count at the Smith Street location on April 24, 2020. The particle counter at that site initially malfunctioned, necessitating repairs that were completed by November 20, 2020. Since that time, all eight sensors have been fully operational. RIAC provided RIDOH with the raw data through September 30, 2022, at which point, there were more than 22 months of complete, high-quality data collected simultaneously by both sensors at the four locations. All eight sensors have captured more than 95% of the possible data points during that time and meet RIDOH's expectations for data quality and completeness. RIDOH believes that RIAC has met the Legislature's requirement for RIAC to collect at least 20 months of complete data prior to sunsetting the legislation.

Sensor Location	Black Carbon	Particle Count
Fieldview	97.4%	97.9%
Lydick	99.7%	99.7%
Pembroke	99.1%	98.2%
Smith	99.2%	96.9%

Percent of possible data points captured by each sensor from November 20, 2020, through December 31, 2022, are as follows:

Due to previously noted staffing challenges, RIDOH has not finished its report based on the data collected from July 1, 2021, through June 30, 2022. In the past, RIDOH had adequate staff resources to work on this report, but in the past three years, increasing demands for staff time and challenges in replacing staff have made it difficult for RIDOH to interpret the data and complete the report. Other State priorities, such as dealing with per- and polyfluoroalkyl substances (PFAS) in drinking water and COVID-19, and a new federally funded grant have occupied the time of the staff who would write this report. Staffing challenges have limited our options to address this situation. One of RIDOH's two toxicologists from the team has drafted this report in the past; however, one toxicologist position has been vacant since the previous staff member resigned on June 30, 2022. RIDOH has prioritized the time of the sole toxicologist to focus on other priorities, including the work needed to get the grant renewed and address

PFAS risks, while projects without dedicated funding have not been completed. Earlier this month, RIDOH hired a contractor to fulfill the responsibilities of the grant-funded position, and that may allow RIDOH to resume work on the Airport Air Quality report. However, a contractor is more expensive than a permanent State employee, so RIDOH is only able to hire the contractor for 20 hours per week, and due to the extensive training required for this contractor, RIDOH won't likely start seeing a net increase in productivity until well into the duration of the three-month contract.

Overall, the Act has resulted in the generation of a significant quantity of high-quality data, particularly in the past two years when all sensors were fully operational. Although the staffing challenges have prevented RIDOH from interpreting the data and completing the report, we have analyzed much of the data from the most recent year, and the results appear to be in line with previous years. The monitoring has generated a substantial body of data that provides a clear picture of air quality levels in the neighborhoods around the airport. Those data can be used in future studies to examine the relative contribution of the airport versus other sources, such as traffic, to examine the impact of the COVID-19 pandemic on air pollution levels, and/or to compare them to health data. RIDOH does not have the staff resources to complete an indepth analysis. RIDOH is exploring whether academic partners might be able to provide a more thorough analysis of the data.

Overall, RIDOH believes that the *Permanent Air Quality Act* has been very successful at achieving its goal of providing a clear picture of air quality around T. F. Green Airport. RIDOH believes that the sunset conditions set forth by the Legislature have been met. Additional data might provide new insights, but it appears that the volume of data is more than sufficient for any analyses examining the impact of the airport on air quality in Warwick or examining the impact of air quality in Warwick on health outcomes.

Please do not hesitate to contact me with any questions.

Sincerely,

Deputy Seema Dixit on behalf of Utpala Bandy, MD, MPH Interim Director