

Oak Bluffs Board of Health Board of Health Moratorium

The Installation of Certain Artificial Sports Playing Surfaces In the Town of Oak Bluffs

WHEREAS, Per- and polyfluoroalkyl substances, also known as PFAS, are a large group of manmade chemicals that have been manufactured and used in a variety of industries since the 1940's and are referred to as 'forever chemicals' inasmuch as they are persistent in the environment and our bodies, mobile in the environment and many will not naturally degrade. PFAS chemicals are most often commercially used to create grease, water, and stain resistant barriers for materials, including Teflon, grease-resistant take-out containers, and upholstery and carpet treatments; these chemicals are also found in firefighting foam and gear.¹

WHEREAS, PFAS compounds can be found in:

- Food packaging, in certain materials, processed with equipment that used PFAS, or made from materials grown in PFAS-contaminated soil or water.
- Commercial household products, including stain- and water-repellent fabrics, nonstick products (e.g., Teflon), polishes, waxes, paints, cleaning products, firefighting gear, and fire-fighting foams (a major source of groundwater contamination at airports and military bases where firefighting training occurs).
- Workplaces, such as production facilities or industries (e.g., chrome plating, electronic manufacturing, or oil recovery) that use PFAS.
- Drinking water, typically localized, and associated with a specific facility (e.g., airports, military installations, manufacturer, landfill, wastewater treatment plant, firefighter training facility), *including within local the drinking water*.
- Living organisms, including fish, animals and humans, where PFAS have the ability to build up and persist over time.
- Certain fertilizer and compost materials.

¹ The U.S. Environmental Protection Agency's Office of Pollution Prevention and Toxics defines PFAS as "A structure that contains the unit R-CF₂-CF(R')(R''), where R, R', and R'' do not equal H and the carbon-carbon bond is saturated (note: branching, heteroatoms, and cyclic structures are included). The William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, (P.L. 116-283) (hereafter "NDAA for FY 2021") Section 332. Defines PFAS as "A man-made chemical in which all of the carbon atoms are fully fluorinated carbon atoms, and man-made chemicals containing a mix of fully fluorinated carbon atoms, partially fluorinated carbon atoms, and non-fluorinated carbon atoms."

- Certain artificial athletic playing surfaces, including, without limitation, playing fields, running tracks, racquet sports facilities, playgrounds, and other recreational surfaces, unless said surfaces can be utilized with no risk of leaching PFAS.²

WHEREAS, most people have been exposed to PFAS, and as such there has been a plethora of scientific, peer reviewed literature generated examining the persistence of PFAS, the effects of exposures and other effects of PFAS on the public health.³

WHEREAS, concerns have been raised regarding human health and ecological risks associated with certain PFAS chemicals. The Town of Oak Bluffs is following the guidance and testing requirements of Massachusetts Department of Environmental Protection (MassDEP) as it pertains to PFAS.

WHEREAS, on April 20, 2022, the Massachusetts PFAS Task Force issued a “Final Report of the PFAS Interagency Task Force,” in which they state they will “[p]rohibit the sale of consumer products with intentionally added PFAS” by 2030, “expand PFAS regulation” by regulating PFAS as a class and defining them as “fluorinated organic chemicals containing at least one fully fluorinated carbon atom,” and encourage MADEP to increase the number of PFAS regulated in the Commonwealth.⁴

WHEREAS, State House and Senate bills HD 3324 & SD 2053 were filed by Rep. Kate Hogan and Sen. Julian Cyr for the 2023-24 legislative session, proposing a ban on PFAS in products which would include food packaging, cookware, children’s products, fabric treatments, personal care products, cookware, rugs, carpets, and upholstered furniture and firefighter protective gear by January 1, 2026. All other products would be PFAS free by January 2030. PFAS would become a regulated class of chemicals and a fund for drinking water remediation will be created.⁵

WHEREAS, the scientific evidence demonstrates that the continued use and environmental presence of PFAS on the island of Martha’s Vineyard constitutes a clear and present danger to

² Executive Office of the President of the United States, *Per- And Polyfluoroalkyl Substances (PFAS) Report*. A Report by the Joint Subcommittee on Environment, Innovation, and Public Health, Per- & Polyfluoroalkyl Substances Strategy Team of The National Science and Technology Council. March 2023. This report is hereafter cited as White House Report. Available at <https://www.whitehouse.gov/wp-content/uploads/2023/03/OSTP-March-2023-PFAS-Report.pdf>.

³ Health effects documented for some PFAS include effects on the endocrine system, including liver and thyroid, as well as metabolic effects, developmental effects, neurotoxicity, and immunotoxicity. UMass Lowell, Toxics Use Reduction Institute (TURI). PFAS information reviewed by the Science Advisory Board, <https://www.turi.org/Our Work/Policy/Toxics Use Reduction Act/Councils and Committees/TURA Science Advisory Board/PFAS information reviewed by the Science Advisory Board> (2019).

⁴ <https://malegislature.gov/Events/Hearings/Detail/4271>; Report available at <https://www.mma.org/resource/pfas-in-the-commonwealth-of-massachusetts-final-report-of-the-pfas-interagency-task-force/>

⁵ <https://malegislature.gov/Bills/193/HD3324>

the public health of the inhabitants of the Island. These sources are too numerous to cite in this Order, but many have been read, considered, and constitute the basis of this Moratorium.⁶

WHEREAS, it is widely known that the most prudent action to decrease PFAS pollution on the Island is to purchase fewer PFAS-containing products. This can be challenging because of the persistent presence of PFAS in so many household and consumer products; however, the Town can itself minimize and mitigate the dangers from PFAS-containing products and byproducts, by minimizing its use of PFAS-containing products.

WHEREAS, Martha's Vineyard's main aquifer is found in the glacial outwash deposits that occupy about 60 percent of the Island, consisting of thick layers of sand and gravel dropped twenty thousand years ago by glacial meltwater streams. Nearly 100% of the water consumed by people and animals on the island of Martha's Vineyard come from this aquifer, which is a sole-source aquifer.⁷

WHEREAS, certain mitigation steps such as purchasing PFAS-free alternatives to these products and prudent avoidance of utilizing PFAS-containing products and materials will help decrease the amount of additional PFAS entering the Island's sole source aquifer, surface waters, soil, fish, and wildlife, and therefore minimize risks of adverse health outcomes to the residents of Oak Bluffs.⁸

WHEREAS, Artificial turf carpets, shock pads, and some infills have known environmental and health hazards. They contain toxic chemicals, including flame retardants, plasticizers, and PFAS; each field can shed hundreds of pounds of microplastics with these toxic chemicals each year.⁹

WHEREAS, in the educated opinion of the Board of Health, based upon a review of scientific papers, oral conversations and public hearings, the installation of a PFAS containing athletic surface in the Town of Oak Bluffs may contaminate the drinking water supply of the Town of Oak Bluffs as well as other municipalities on the Island of Martha's Vineyard. This significant risk of contamination may lead to undesired results, including PFAS levels over the Maximum Contaminant Level (MCL) set by MADEP, which in turn would adversely affect the Island's drinking water supply.

WHEREAS, The Oak Bluffs Board of Health, upon careful review of the scientific literature, and sources cited above, and in considered reasonableness, is of the opinion that placement of a turf surface on the athletic fields over the sole-source aquifer for Martha's Vineyard would

⁶ See, Interstate Technology Regulatory Council PFAS listed references at: <https://pfas-1.itrcweb.org/references/>

⁷ A sole-source aquifer is defined by the US EPA as "one where the aquifer supplies at least 50% of the drinking water for its service area." <https://www.epa.gov/dwssa/overview-drinking-water-sole-source-aquifer-program>. Clearly, Martha's Vineyard is served by such an aquifer.

⁸ White House Report at 44.

⁹ *Per- and Poly-fluoroalkyl Substances (PFAS) in Artificial Turf Carpet*, The Massachusetts Toxics Use Reduction Institute (TURI), UMass Lowell. <https://www.turi.org/content/download/12963/201149/file/TURI+fact+sheet+-+PFAS+in+artificial+turf.pdf>

constitute a nuisance, and, pursuant to the aforementioned statutory and regulatory powers of Boards of Health in the Commonwealth of Massachusetts, issues this Moratorium.¹⁰

WHEREAS, the Board of Health is of the opinion that it is prudent to take steps at this time to cease and desist from any further introduction of PFAS-containing materials until the potential public health risks and nuisances can be studied, evaluated, abated and otherwise determined.

1. **NOW THEREFORE, Pursuant to G.L. c. 111, §§6, 31 and 122**, The Board of Health for the Town of Oak Bluffs, upon consideration of the above matters, **HEREBY ORDERS**: That the Board of Health institute a **MORATORIUM** on the installation of artificial turf on any land, of any size, in the Town, for up to 36 months in order to further study the PFAS risk issue as set forth herein.
 - a. Should there be a determination that PFAS is not harmful or toxic to humans in less than the said 36 months, the Board of Health will revisit the duration of this **MORATORIUM** and may retire the moratorium at such earlier date.
 - b. Should there be a reasonable alternative to products posing a PFAS risk, and if such reasonable alternative is studied and approved by the Board of Health, this **MORATORIUM** shall be retired automatically upon the approval of the use of such reasonable alternative.
 - c. Should there be good cause, as determined by the Board of Health, to continue the duration of this **MORATORIUM**, beyond the said 36-month term, the said Board shall extend the term of this moratorium for a period it then deems reasonable, upon a proper public health risk analysis.
2. That the approval, installation, and use of athletic playing surfaces containing PFAS be **ENJOINED** until the said Board of Health can conduct a full public health safety and risk analysis of said materials of athletic playing surfaces insofar as the risks attendant upon the Town should such a surface be installed.
3. That all other Committees, Boards and Commissions within Oak Bluffs currently considering any application for the installation of such turf field shall **CEASE AND DESIST** all further proceedings and considerations of such application until the Board of Health rescinds this Moratorium following its study of the risks mentioned hereinabove.
4. That the Board of Health commission a full Public Health safety and risk analysis, as called for in Paragraph 1, above, forthwith.

¹⁰ See, *Hamel v. Board of Health of Edgartown*, 40 Mass. App. C. 420 (1996). “[b]oards of health may make reasonable health regulations. That language confers plenary power to promulgate health regulations—reasonable ones—that are general in application.” Citing *Druzik v. Board of Health of Haverhill*, 324 Mass. 129, 133, 85 N.E.2d 232 (1949) and *Independence Park, Inc. v. Board of Health of Barnstable*, 403 Mass. 477, 480, 530 N.E.2d 1235 (1988). The holding in *Druzik* was, “When undergoing judicial testing for reasonableness, a board of health regulation enjoys the status of a statute, i.e., the court makes all rational presumptions in favor of the validity of the enactment. Only when there is no rational connection between the regulation and the public purpose to be achieved will a court strike it down.”

5. That agents of the said Board of Health be empowered to take such steps to carry out this **ORDER** as are deemed reasonable, desirable and/or necessary by the Board, pursuant to G.L. c. 111, § 30¹¹, and 310 CMR 11.05 (1)¹².

SO ORDERED.

Passed by a vote of ____ members voting in the affirmative, ____ members voting in the negative, and ____ members abstaining from voting, this ____ day of _____, 2023.

By: _____, Chairman
William White, Chairman

By: _____
Tom Zinno

By: _____
James Butterick

¹¹ Boards of health may appoint agents or directors of public health to act for them in cases of emergency or if they cannot conveniently assemble, and any such agent or director shall have all the authority which the board appointing him had; An agent or director of public health appointed to make sanitary inspections may make complaint of violations of any law, ordinance or by-law relative to the public health.

¹² (1) General. Whenever an emergency exists in which the interest of protecting the public health or the environment requires that ordinary procedures be dispensed with, the board of health or its authorized agent, acting in accordance with the provisions of M.G.L. c. 111, § 30, may, without notice or hearing, issue an order reciting the existence of the emergency and requiring that such action be taken as the board of health deems necessary to meet the emergency. Notwithstanding any other provision of 310 CMR, any person to whom such order is directed shall comply therewith within the time specified in the order. Each day's failure to comply with the order shall constitute a separate offense. Upon compliance with the order and within seven days after the day the order has been served, he may file a written petition in the office of the board of health requesting a hearing. He shall be granted a hearing as soon as possible. The procedures for such hearing shall otherwise conform with the hearing requirements which would have existed had the order been issued under non-emergency circumstances.