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For a thriving New England

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April 8, 2021

By Email

The Honorable David A. Bennett
Chair, House Committee on Environment and Natural Resources
State House
Providence, RI 02903

RE: *House Bill No. 5923, An Act Relating to Health and Safety—High-Heat Waste Facility Act of 2021*

Dear Chair Bennett:

Thank you for the opportunity to submit testimony on House Bill 5923, an Act Relating to Health and Safety—High-Heat Waste Facility Act of 2021. Conservation Law Foundation (CLF) **supports** this bill.

CLF is a member-supported nonprofit organization working to conserve natural resources, protect public health, and build healthy communities in Rhode Island and throughout New England. Through its Zero Waste Project, CLF aims to improve waste diversion and recycling programs and protect communities and our environment from the dangers of waste incineration and other high-heat waste processing.

House Bill 5923 would protect Rhode Island and its residents from the toxic, climate-damaging impacts of burning waste by prohibiting the construction and operation of new waste incinerators or facilities that use other high-heat waste processing technologies. This bill would prohibit the issuance of new permits or licenses for any new facility that: 1) generates electricity by combusting, gasifying, or pyrolyzing any type of waste or recyclables; 2) generates electricity from the combustion of fuels derived from waste or recyclables; or 3) processes or treats any type of waste at temperatures above 400 degrees Fahrenheit.

Rhode Island has a long-standing policy against waste incineration.[1] And for good reason: waste incinerators emit more carbon dioxide, dioxins, carbon monoxide, nitrogen oxides, mercury, lead, and sulfur dioxides than coal-fired power plants.[2] Waste gasification and

[1] *See* R.I. Gen. Laws § 23-19-3(14) & (16).
[2] *See* Energy Justice Network, *Trash Incineration More Polluting Than Coal*, http://www.energyjustice.net/incineration/worsethancoal.

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pyrolysis—and the combustion of fuels derived from these processes—have similar emissions profiles.[3] Burning waste-derived fuels emits just as much carbon dioxide as if the waste had been incinerated,[4] and more particulate matter, lead, and sulfur than burning diesel fuel.[5] Plastic-derived fuels in particular contain high levels of dioxins,[6] a toxic group of carcinogens.[7]

High-heat technologies are not "circular," nor do they generate renewable energy—creating waste, then burning it, is a linear process. Converting waste to fuel requires a significant amount of external energy, which is almost always supplied by burning fossil fuels.[8] High-heat technologies generally use between 5 and 87 times as much energy as can be obtained from burning the fuels created in the process.[9] That energy deficit is a primary reason why so many attempts at waste gasification and pyrolysis have ended in failure.[10]

High-heat proponents will often claim that technologies like pyrolysis do not involve burning and that they are "closed systems" with no emissions or toxic byproducts. These claims are false. Pyrolysis, gasification, and so-called "advanced recycling" are almost always used to generate waste-derived fuel.[11] These technologies effectively split the incineration process into two parts: first, waste is heated in a limited-oxygen environment to generate synthetic fuels and waste byproducts; second, those fuels—and often the waste products—are then burned, generating the same toxic and climate-damaging pollutants as incinerators. All high-heat waste

[3] Neil Tangri & Monica Wilson, Global Alliance for Incinerator Alternatives, *Waste Gasification & Pyrolysis: High Risk, Low Yield Processes for Waste Management* 9 (2017), https://www.no-burn.org/wp-content/uploads/Waste-Gasification-and-Pyrolysis-high-risk-low-yield-processes-march-2017.pdf.

[4] Andrew Rollinson, *Why Pyrolysis and 'Plastic to Fuels' Is Not a Solution to the Plastics Problem* (Dec. 4, 2018), https://www.lowimpact.org/pyrolysis-not-solution-plastics-problem/.

[5] David Azouly, *Plastic & Health: The Hidden Costs of a Plastic Planet*, 48 (2019), https://www.ciel.org/wp-content/uploads/2019/02/Plastic-and-Health-The-Hidden-Costs-of-a-Plastic-Planet-February-2019.pdf.

[6] Rollinson, *supra* note 4.

[7] U.S. Environmental Protection Agency, *Learn About Dioxin*, https://www.epa.gov/dioxin/learn-about-dioxin.

[8] Denise Patel, Global Alliance for Incinerator Alternatives, *All Talk and No Recycling: An Investigation of the U.S. "Chemical Recycling" Industry* 10 (2020), https://www.no-burn.org/wp-content/uploads/All-Talk-and-No-Recycling_July-28.pdf.

[9] Rollinson, *supra* note 6.

[10] *See* Tangri, *supra* note 3, at 7, 11–13.

[11] *See* Patel, *supra* note 8, at 3.

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technologies generate solids, liquids, and/or gases that contain high levels of lead, mercury, dioxins, and other toxics.[12]

Moreover, burning waste contributes to inequity and environmental injustice. Nationwide, almost 80% of waste incinerators are located in communities of color and low-income communities.[13] Our neighbors in Connecticut and Massachusetts are prime examples of these inequitable and unjust burdens. Connecticut burns two-thirds of its trash at incinerators located in communities of color in Hartford and Bridgeport. And six out of seven waste incinerators in Massachusetts are in or near environmental justice communities. These areas have higher asthma rates and higher blood lead levels than most of New England, and they have suffered disproportionately from the COVID pandemic—all related to the polluted air they are forced to breathe every day.

Burning our waste is not the solution to the rapidly filling Central Landfill. More than 73% of what we bury in the Landfill is plastic, paper, glass, metal, textiles, or organic waste, most of which could be recycled or composted.[14] By banning unrecyclable plastics, improving organic waste diversion and composting, and improving recycling and reuse through a deposit return system and extended producer responsibility for packaging, we can implement the zero waste alternatives that will significantly reduce our waste. The General Assembly is considering several bills this session that would put in place many of these reforms.

These zero waste approaches to reuse, reduction, and diversion generate far fewer emissions than burying or burning waste.[15] Moreover, burning waste costs considerably more than recycling or composting[16] while supporting fewer jobs. Per ton of waste disposed, composting can generate five times as many jobs as burning waste, and recycling twenty times as many jobs.[17]

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[12] Azouly, *supra*, note 5, at 47.

[13] The New School, *U.S. Municipal Solid Waste Incinerators: An Industry in Decline* 34 (2019), https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5d5c4bea0d59ad00012d220e/1566329840732/CR_GaiaReportFinal_05.21.pdf.

[14] Rhode Island Solid Waste Characterization Study, 13 (2015), http://www.rirrc.org/sites/default/files/2017-02/Waste%20Characterization%20Study%202015.pdf.

[15] *See* Tellus Institute, Assessment of Materials Management Options for the Massachusetts Solid Waste Master Plan Review 1 (2008), https://www.tellus.org/pub/Final_Report-Materials_Management_Options_for_MA_SW_Master_Plan_Review_-_With_Appendices_-_12-08.pdf

[16] Marie Donahue, Institute for Local Self-Reliance, *Waste Incineration: A Dirty Secret in How States Define Renewable Energy* 14 (2018), https://ilsr.org/wp-content/uploads/2018/12/ILSRIncinerationFInalDraft-6.pdf.

[17] Tellus Institute, *More Jobs, Less Pollution: Growing the Recycling Economy in the U.S.* 34–35 (2011), https://www.nrdc.org/sites/default/files/glo_11111401a_0.pdf.

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Providence has already enacted a ban on all high-heat waste facilities.[18] House Bill 5923 would bring the rest of the state along and protect all Rhode Islanders from the toxic impacts of burning waste. CLF **supports** House Bill 5923 and urges its passage. Thank you for the opportunity to submit this testimony.

Sincerely,

Kevin Budris
Staff Attorney, CLF Zero Waste Project

cc: HouseEnvironmentandNaturalResources@rilegislature.gov
Representative Justine Caldwell (by Email)

[18] *See* Olivia Synoracki, Conservation Law Foundation, *Incineration in Providence Has Met Its Match* (Oct. 15, 2020), https://www.clf.org/blog/incineration-in-providence-met-its-match/.