

May 5, 2026

The Honorable Robert Britto, Chairman

Senate Commerce Committee

State House

Providence, RI 02908

**Oppose S-3224**

Dear Chairman Britto:

On behalf of Quonset Soil Solutions (QSS), the developer for the proposed biosolid pyrolysis facility in Quonset State Park, I write with extreme concerns about S-3224 which would prohibit the operation of any thermal waste conversion facility such as pyrolysis within the Quonset Point/Davisville Industrial Park.

In short, the legislation appears to be overly excessive in its legislative reach with the government seeking to prohibit certain technologies – even one with environmental merits – and in so doing, casts negative aspersions on the pyrolysis technology. Equally important, both legislative chambers have already embraced the creation of a joint study commission on the state’s biosolid looming crisis to study potential solutions, including biochar pyrolysis, a commission we wholeheartedly support and to which we hope to contribute.

As the Committee is no doubt aware, the concept of a biosolid pyrolysis facility was born out of the crisis Rhode Island faces with the potential closure in the near term of the Woonsocket incinerator which handles sludge for dozens of cities and towns. Traditional disposal methods of sludge (such as incineration, landfilling and direct land application) are becoming significantly limited as new restrictions regarding sludge contaminants and the need to protect the public takes priority.

QSS proposed the \$225 million, private investment biochar pyrolysis facility as a potential solution to the state’s critical needs. Pyrolysis is the process of

decomposing organic materials by applying high heat in an oxygen-deprived environment. Pyrolysis is a thermochemical treatment process that can be used to safely manage and reduce the volume of biomass. The pyrolysis process involves heating dried feedstock material in an oxygen-limited environment to break down organic components and produce a carbon-rich solid byproduct, known as biochar, along with other gaseous byproducts (pyrolysis gas).

We have put in place enormous environmental safeguards. For example, the proposed facility will accept dewatered solids offsite from wastewater treatment facilities in Rhode Island to be treated through the pyrolysis process to safely eradicate PFAS and other chemicals of concern, while strongly binding heavy metals. Unlike incineration, which has ash and heavy metals disposal issues, the biochar byproduct of the pyrolysis process is an effective contamination remediation medium.

The facility has been designed to prioritize odor control and air quality protection, particularly at the earliest and most odor-sensitive stages of operation. Air from activities such as sewage sludge reception, drying, and material conveyance is designed to be fully captured and controlled. Sewage sludge reception occurs within an enclosed building maintained under negative pressure and equipped with an interlock system, and all associated process air is routed through a multi-stage air pollution control system specifically engineered to reduce odorous compounds before that air is released to the atmosphere. Operation of this odor control system is integral to the Facility's processes, consistent with the conditions of the Facility's Rhode Island Department of Environmental Management (RIDEM)- approved minor source air permit.

For later-stage operations, namely the pyrolysis process, emissions are managed through additional layers of control. Most notably, these air streams are directed through a thermal oxidizer, which is designed to destroy more than 99 percent of volatile organic compounds, including compounds commonly associated with odors. This level of destruction is consistent with best available control technology and established industry practices.

In addition to these physical and operational controls, the Facility's emissions have been evaluated using air dispersion modeling, a scientific tool used to predict how emitted compounds disperse once released into the atmosphere. Modeling was

performed based on worst-case, maximum operations (i.e., potential to emit) for multiple emission constituents, and the results indicate that concentrations at and beyond the Facility's property line remain below the respective Acceptable Ambient Levels (AALs) established by the RIDEM to protect public health.

Taken together, the Facility's design reflects a layered and preventative approach to odor control: capturing air at the source, treating it through multiple stages, destroying odorous compounds prior to atmospheric release, and demonstrating through air dispersion modeling that emissions comply with RIDEM's applicable health-based ambient criteria.

Last, we must take this opportunity to underscore that QSS participated in a very lengthy and robust approval process, laid out by the Quonset Development Corporation for a proposal of this nature, and embarked on a \$225 million investment. That process began on November 19, 2024 when QDC in public session – not in secret as some would suggest - voted to approve the lease agreement.

In closing, I wish to underscore our continued commitment to engage in community and statewide conversations around the state's critical biosolid removal needs in general, and the proposed Quonset biochar facility, in particular. We remain at your disposal to provide any additional information you may request.

Thank you for your consideration.

Sincerely,

George Zainyeh on behalf of Quonset Soil Solutions