

To: Select Board
From: Ken Stern, Chair, Canterbury Conservation Commission
Re: Recommendation to regulate use of potentially toxic materials
Date: 3/25/2024

Two issues of concern have come to the attention of the Conservation Commission: the potential use of “thermally treated soil” (aka “cooked dirt” or “dirty dirt”) in town, and growing concerns about toxins lingering in “biosolids” that are spread on land.

The CCC urges the Select Board to enact rules that prevent the use of “thermally treated soil” in Canterbury because of the risk of contaminants in the soil being disturbed or released into ground water.

In New Hampshire, a maze of RSAs, regulations, and rules governs how soils with contamination can be treated and distributed. A Loudon-based company, Environmental Soil Management, Inc. (ESMI), treats and distributes contaminated soil.

The regulations so severely restrict the uses of the treated soil that we believe the treated soil should not be used anywhere in Canterbury. In a [letter from DES Solid Waste Management Bureau](#) (Laurel Pushee to Thomas Blanchette, Fire Chief, Town of Loudon, 9/22/2020), the agency explained:

“1. ESMI’s Solid Waste Management Facility Permit (#DES-SW-SP-96-002) and the Rules, specifically Env-Sw 1503.11, allow ESMI to treat certain types of contaminated soils and distribute these treated soils as a certified waste derived product¹, **provided** the treated soil meets the standards of Env-Sw 903.05 and **the soils are not distributed and used at the following locations:** (a) in residential applications; (b) in playground applications; (c) within the 100-year flood plain or a wetland; (d) on or in lands used for the production of crops for direct human consumption; (e) within a recharge area of any sole source drinking water supply; or (f) within 100 feet of any surface water.”

Clearly, this treated soil should not be allowed anywhere near wells, groundwater, surface water and wetlands, nor in hydric soils. (A hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part.)

Water travels through soil without regard for property lines and can leach contaminants from treated soil and carry them onto other properties, posing risks for well water. In addition, severe weather events are causing road damage more and more frequently, increasing the risk that treated soil buried in a roadway could be disturbed and washed onto the types of properties where the use of the treated soil is prohibited.

We raise the second concern – the increasing concerns about spreading biosolids on land – as an argument for being cautious with the use of any product containing “treated” contaminants. States have for decades allowed, and even encouraged, spreading biosolids on land as fertilizer and as an efficient way to dispose of the waste. (According to the [EPA](#), “Biosolids” refers to treated sewage sludge that meets the EPA pollutant and pathogen requirements for land application and surface disposal.)

However, today’s waste water treatment plants were not built to manage “forever chemicals” known as PFAS. The state of Maine banned the use of sludge-based fertilizers in 2022 after farmers in Maine

started finding high levels of PFAS in milk and meat (see Maine Public article, [*Our sewage...tainted with PFAS*](#)).

This unexpected and detrimental consequence of using sludge-based fertilizer underscores how important it is to be diligent about controlling products that contain treated contaminants.

We urge to Select Board to adopt regulations to prevent the use of thermally treated dirt in Canterbury.