



March 23, 2023

**House Natural Resources, Environment, Tourism and Outdoor Recreation
Lansing, Michigan**

RE: Composting Council of Michigan

Good Morning Chairwoman Pohutsky and fellow members of the committee. My name is Bill Whitley. I own Spurt Industries, a commercial composting business based in Wixom and am an equity partner in My Green Michigan, a food scraps hauling business with a service area that covers all of southern lower Michigan.

I am here today on behalf of the Composting Council of Michigan. The Composting Council of Michigan represents public and private composters across the state. We also count equipment manufacturers and large compost users among our membership.

I also sit on the Governors Solid Waste & Recycling Advisors Group, the executive committee of the Michigan Organics Council and on the Board of Directors of the Michigan Recycling Coalition. Through years of work, we were happy to see the culmination of our efforts to modernize waste management by updating and overhauling regulations in the solid waste law, known as Part 115 of the Natural Resources and Environmental Protection Act. This eight-bill package was signed into law at the end of last session. We are in active discussion with EGLE on the implementation program for the changes and look forward to continued cooperation there in the design and development of the new general permitting process called for in the law.

My goal today is to give you some insight into what composting is and how we benefit the State of Michigan both environmentally and economically.

As you may already know, composting is a natural process of biological decomposition in which organic materials break down in the presence of oxygen. Composting exists on a variety of scales, from small backyard compost tumblers which hold only a few gallons to large commercial operations – in Michigan as large as 40 acres. We are all working to facilitate a process which has occurred naturally since the beginning of time. A simple example is to think about the forest, and the life cycle of a tree: as a tree grows, the nutrients required to grow the tree are drawn from the soil, the tree grows, lives, and when that tree dies, it falls in place and begins to decompose. The ground beneath the tree is covered in leaves and branches, the trunk of the tree. But if you scrape away the top layer and look beneath the leaves or under the trunk – you will find rich black soil which is full of the nutrients and organic matter which are required for and are the foundation of the next generation of plant life.

When we compost, we composters capture the organics from our waste stream, and using highly specialized equipment and carefully controlled processes, accelerate the natural breakdown to manufacture a high quality finished compost which is then used to create healthy soils for the next generation of plant life. These soils are then reapplied across Michigan at organic farms, nurseries, and in a variety of landscaping applications at both the residential and commercial scale.

In our forest example, the leaves and the tree stay, and break down in place to feed the next generation. While that may be the case in nature, human activity changes the equation. For example, each fall when my trees drop their leaves, we place them in yard waste bags, place them at the end of the driveway and they disappear. In the minds of most residents, that is the end of the process. For we composters, it is only the beginning. Many residents are not aware, or do not think about where this material goes after it is placed at the end of their driveway, but these leaves, this yard waste is all going to compost sites across the state.

As these leaves that are taken away in lawn bags every fall aren't returned into the same soil from which the tree grew, over time, the quality of the soil will diminish and with that, its ability to support healthy plant life. Subsequently, those nutrients in the soil must be replenished. At a very high level, there are two common ways to replenish the soil. One method is the use of synthesized chemical fertilizers, and the other is through the application of compost. You can purchase a bag of fertilizer at a big box store and add NPK to your soil. Or you can apply compost to your soil, just as nature intended. Compost is nature's way to grow. Compost is always locally made, annually renewable, bio-based, organic and 100% recycled – simultaneously reducing pressure on landfills and reliance on petroleum and the negative environmental, human health and social impacts generated by both. Compost helps to ensure the materials used in our watersheds are made from native or adapted materials and helps close the loop on nutrient and carbon cycles on a community level. I'll have more on the impact to watersheds later in this testimony.

The composting industry in Michigan was kickstarted when legislation requiring that yard waste be composted instead of going to the landfill went into effect in 1994. Since that time there has been significant growth and evolution in our industry. The US Composting Council has developed certification programs for Operations Managers and for the finished compost product. Many of the members of the Compost Council of Michigan produce a certified product today which is tested regularly for nutrient content, heavy metals contamination, pathogens and over 25 other parameters to demonstrate that we produce a consistent, safe and beneficial product. Michigan currently has over 150 compost sites registered with EGLE which encompass both public and private operations.

Compost operations are local, environmentally sustainable and economically sustainable businesses.

We are local businesses. When I place that bag of leaves at the end of the driveway at my house, those leaves, like the leaves from most of the homes within Representative Arbit's district, they come just 11 miles down the road to Spurt to be composted. Last year at Spurt, we received over 60,000 cubic yards of organic materials – and we produced over 60,000 cubic yards of soils. To put that in some perspective, 60,000 yards stacked on a football field would be nearly 30 feet tall. All of this organic material originated, and all of this soil was used at locations within a one hour drive of our location. This hyperlocal concentration is rather unique in recycling businesses.

We are environmentally sustainable businesses. Compost is produced without any chemical additives. We take organic materials like grass, leaves, branches and woodchips. We combine them in defined recipes, turn and mix them using specialized equipment and then mechanically separate any non-organic items like rocks or plastic contaminants from the finished compost. This aerobic processing of organics prevents the methane generation that would occur were organics to be disposed of in the landfill. Methane is a greenhouse gas and per the EPA is 25x more potent than carbon dioxide as it relates to climate change. The application of compost helps plants to grow, improves nutrient uptake

from the soil, and importantly increases the water holding capacity of the soil. This reduces the need for chemical fertilizers, for irrigation, reduces the volume of stormwater runoff while simultaneously cleaning the stream of water that does runoff after a rain event. I will touch later on how these benefits can be beneficial to the State both environmentally and economically.

We are economically sustainable businesses. Industry studies have shown that there are strong economic benefits to composting. When compared to the landfilling of yard waste, as was the case prior to the 1994 law, composting creates 4 jobs for every 1 that existed previously. Additionally, because we are such local businesses we are fortunate to be resistant to the issues that impact many recycling efforts of other commodities. In plastics recycling for example, some recyclables are transported to Asia to be processed into new goods. Issues such as the price of oil, the availability of shipping containers, geopolitics, and tariffs can have significant impacts on the economics and sustainability of the program. As all of our feedstocks are all sourced from and our finished products used within a one hour radius of our sites, we are very well insulated from these types of issues.

Over the years since 1994, there have been attempts to repeal the landfill ban on yard waste and all of us in the industry appreciate the continued support from the legislature on this critical piece of law. Composting is critical to the achievement of Michigan's recycling goals and a key component of the MI Healthy Climate Plan. There is no way for Michigan to reach our 2030 and 2050 goals or the 45% diversion target established in part 115 last year without a strong composting industry.

The 2021 Gap Analysis that was conducted as part of EGLE's Nextcycle Michigan program provides some valuable data on the Michigan waste stream as a whole, as well as the portion that is currently being captured for recycling. It provides great insight into the current state of composting as well as the opportunity in the years to come. This analysis shows that of the material currently being recycled in Michigan, by weight, the organics we compost are currently the state's second largest recycled stream at 380,000 tons per year. Paper recycling is first on the list, but composting exceeds plastics, glass and metal recycling.

The same study also examined the Michigan waste stream to consider what materials are recyclable, and what portion of those recyclable materials are being captured. The analysis found that 38% of the Michigan waste stream is comprised of organics and could in theory be composted. The analysis shows that while the overwhelming majority of the yard waste in the state is already being composted, significant opportunities remain. The largest opportunity for additional composting is through the capture and collection of food waste. When compared to the yard waste currently composted, there is roughly an equal amount of food waste generated in the State, but we currently capture only about 1% of this food. The potential exists to double the volume of compost produced in the state.

As I introduce food waste composting, if we pause for a moment and think back to the example of the tree in the forest, when we talk about composting food, we should imagine that the tree is an apple tree and now we are thinking about composting the apple. While we generally think of the apple as food, biologically, the purpose of that apple is not to feed people or animals, rather the ultimate purpose of the apple is to provide nutrients to the seeds within the apple and to grow new apple trees. The addition of food, and the nutrients contained within, raises the quality of the compost that is produced and the volume of compost which we can produce. Any type of food can be composted whether it be fruit, vegetable, dairy or animal based. Broadly, anything that was once alive can be composted. Composting is the completion of the earth to earth, ashes to ashes, dust to dust circle of life.

Michigan composters are working to increase the volume of food which is collected from food distribution centers, restaurants, schools, hospitals and individual residences so that it may be composted. For example, Representative Arbit, if you visited Sylvan Table in your district for dinner, all of the food scraps generated from the preparation of the meal are being separated and collected for composting. Some of the food that you would eat is grown in the greenhouses on site in soils which contain the compost manufactured with these food scraps. The composting industry is helping to create and empower a Farm to Table to Farm circular economy within the state.

To further strengthen our industry and better outcomes for Michigan's environment, the Composting Council of Michigan is working on two major projects currently.

- The first is to allow for Marihuana Waste to be processed by licensed composters. When Michigan legalized medicinal, and later recreational marihuana use, the rules for licensing were written in such a way that made it impossible for the waste generated by cultivation (roots, leaves, stems) to be picked up and composted like other organic wastes. Despite this material not having any of the psychoactive chemical THC in them, when it comes to disposal and transportation, it is treated the same as material that does contain THC. Bills were introduced last session with input from both the department and industry to address this problem and were passed out of the House unanimously but unfortunately ran out of time before making it any further. We plan to have these bills reintroduced soon.
- Another initiative we are working on is a pilot program to address what we perceive to be one of the biggest threats to Michigan's tourism economy – which are water quality issues that impact the ability to enjoy the waters of the state. There are two water quality issues which the use of compost can be a significant mitigating factor in preventing. They are algal blooms caused by excessive fertilizer runoff and E Coli pollution as a result of combined sewer system overflows. It's been long known that people flock to Michigan for our pristine waterways and lakes, and these tourism dollars are a major driver to local and state economies. Beach closures and lost revenues are only going to get worse if we don't address this problem. We are working on piloting a program here in Michigan that mirrors a successful initiative undertaken in the late 1990's in Washington State's Puget Sound. At the time, excessive development had changed the characteristics of the stormwater running into their streams to the point that the salmon were not spawning as they used to – which posed a significant threat to their local economy. Significant amounts of research were conducted as to the causes and it was ultimately determined that the application of compost could reverse this condition. They developed a program called 'Soils for Salmon' and instituted best management practices which included the application of compost to achieve a 5% organic matter content in the soil and were able to reverse the pollution in the streams and save their salmon population. We in Michigan can learn from the successes in Washington state and mirror this program in our own way – just as they developed 'Soils for Salmon' we must 'Landscape for the Lakes'. I look forward to sharing more information on this vital program in the future.

Thank you for your time today. I greatly appreciate the opportunity to share the work being done by Michigan composters and the opportunities to grow and improve the industry and the environment within the state. We look forward to working with you and your colleagues as we address these important issues and I welcome any questions that you may have.