

## GOAL

## HOW MCGILL CAN HELP YOU REACH IT

**Save** water and **reduce** potable water consumption

Amend soil to bring organic matter (OM) content up to 5 percent and see water use drop by 30-50 percent. Boost reductions even higher by diverting treated wastewater from discharge to irrigation. Our mobile dewatering system removes 99 percent of suspended solids.

**Manage** stormwater and **control** erosion

Some of the same mechanisms that reduce water consumption with compost use also minimize stormwater runoff. Compost holds moisture, yet drains quickly, moving water laterally through the soil. A compost engineered for erosion control also disperses the energy impact of rain.

**Recycle** water treatment residuals

Alum and ferric sludges, as well as biosolids, can be composted, and because our high-rate, scientifically-enhanced composting process negates some of the issues associated with other disposal technologies, we can recycle your residuals *and* make a product with high market value. If on-site recycling and reuse is preferred, we also design, build and operate facilities for others.

**Increase** recycling rates for municipal solid waste (MSW)

Why stop with food waste? As much as 60-70 percent of your MSW waste stream may be compostable: pre- and post-consumer food waste, yellow grease, cooking oil, biodegradable plastic, C&D debris (including gypsum board, unpainted/untreated dimensional lumber and some engineered wood products), yard waste, clean and dirty paper, waxed and unwaxed cardboard, untreated pallets, wood waste, wood ash and charcoal. Simply separate from the primary waste stream and deposit in one McGill container. Food waste can be secured in biodegradable bags to minimize mess and odor between collection days. McGill can provide associated dumpster and transportation services.

**Reduce** chemical use and **prevent** pollution

Reduce chemical fertilizers as much as 50 percent in compost-amended soil. Compost also reduces pollutant loads in stormwater runoff and binds some chemicals in the soil, making certain pollutants unavailable for plant uptake.

**Save** energy and **increase** the use of renewable energy

A few years ago, the U.S. fertilizer industry moved off-shore, and most fertilizers now cross oceans to reach American soil. Nitrogen fertilizers — the most-used synthetic — are derived from natural gas. Simply replace some of that synthetic with compost to cut energy consumption. Interested in energy generation? In truth, the economics of generating energy from renewable resources don't usually work in the U.S. where energy is cheap, so renewable energy typically costs more to produce than it generates in revenues. But where renewable energy is subsidized, anaerobic digestion (AD) combined with composting is an unbeatable, sustainable solution. We can build your entire system or offer composting augmentation to existing AD units. If your digestate is currently going to a landfill or incinerator, let's talk.

**Buy** local, recycled, renewable

Compost feedstocks are locally sourced, and compost is locally manufactured and locally utilized. Composting recycles biodegradable waste, making compost a recycled product. Waste is always being generated, which makes compost a renewable product and the entire system a sustainable closed loop.



|   | <b>DoD Strategic Sustainability Performance</b>   | <b>Executive Order 15314 and other recent EOs related to sustainability</b>  | <b>LEED and Sustainable Sites Credits</b>  | <b>Green Purchasing Mandates and Initiatives</b>   |
|---|---|--|--|--|
| <b>Composting the biodegradable fraction of MSW and C&amp;D debris including gypsum</b>                 | <ul style="list-style-type: none"> <li>Alternative disposal method for organic wastes</li> <li>Solid waste minimized and optimally managed</li> </ul> | <ul style="list-style-type: none"> <li>Alternative chemicals and processes</li> <li>Increase diversion of compostable materials</li> <li>Divert at least 50% of non-hazardous waste</li> </ul>   | <ul style="list-style-type: none"> <li>Construction waste management</li> <li>Storage and collection of recyclables</li> <li>On-site composting</li> </ul> | <ul style="list-style-type: none"> <li>Reduce GHG emissions</li> <li>Eliminate waste, recycle and prevent pollution</li> <li>Foster markets for sustainable technologies/products</li> <li>Design-operate sustainable buildings</li> </ul> |
| <b>Composting residuals from the treatment of drinking water and wastewater</b>                         | <ul style="list-style-type: none"> <li>Alternative disposal method for organic wastes</li> <li>Solid waste minimized and optimally managed</li> </ul> | <ul style="list-style-type: none"> <li>Alternative chemicals and processes</li> <li>Increase diversion of compostable materials</li> <li>Divert at least 50% of non-hazardous waste</li> </ul>   | <ul style="list-style-type: none"> <li>Innovative wastewater technologies</li> </ul>   | <ul style="list-style-type: none"> <li>Reduce GHG emissions</li> <li>Eliminate waste, recycle and prevent pollution</li> <li>Foster markets for sustainable technologies/products</li> <li>Design-operate sustainable buildings</li> </ul> |
| <b>Using biological systems for bioremediation and bioenergy production</b>                             | <ul style="list-style-type: none"> <li>Alternative disposal method for organic wastes</li> <li>Minimize waste and pollution</li> </ul>                | <ul style="list-style-type: none"> <li>Increase use of renewable energy</li> <li>Alternative chemicals and processes</li> <li>Increase diversion of compostable materials</li> <li>Divert at least 50% of non-hazardous waste</li> </ul> | <ul style="list-style-type: none"> <li>Protect and restore habitat</li> <li>Green power and carbon offsets (LEED 2012)</li> </ul>                          | <ul style="list-style-type: none"> <li>Reduce GHG emissions</li> <li>Eliminate waste, recycle and prevent pollution</li> <li>Foster markets for sustainable technologies/products</li> <li>Design-operate sustainable buildings</li> </ul> |
| <b>Using compost to reduce water consumption</b>  | <ul style="list-style-type: none"> <li>Irrigation and industrial water use</li> <li>High performance, sustainable buildings</li> </ul>                | <ul style="list-style-type: none"> <li>Reduce potable water consumption</li> <li>Reduce agency industrial, landscaping and agricultural water consumption</li> <li>Procure water-efficient products</li> </ul>                           | <ul style="list-style-type: none"> <li>Water efficiency landscape</li> </ul>   | <ul style="list-style-type: none"> <li>Green product resource</li> <li>Conserve and protect water resources</li> <li>Eliminate waste, recycle and prevent pollution</li> <li>Design-operate sustainable buildings</li> </ul>               |
| <b>Using compost to manage stormwater</b>   | <ul style="list-style-type: none"> <li>Stormwater management</li> <li>High performance, sustainable buildings</li> </ul>                              | <ul style="list-style-type: none"> <li>Alternative chemicals and processes</li> </ul>  | <ul style="list-style-type: none"> <li>Protect and restore habitat</li> <li>Stormwater design, quantity control</li> </ul>                                 | <ul style="list-style-type: none"> <li>Conserve and protect water resources</li> <li>Foster markets for sustainable technologies/products</li> <li>Design-operate sustainable buildings</li> </ul>   |
| <b>Using compost to reduce chemicals and prevent pollution (and other uses not specified elsewhere)</b> | <ul style="list-style-type: none"> <li>Minimize waste and pollution</li> <li>Integrated pest management</li> </ul>                                    | <ul style="list-style-type: none"> <li>Alternative chemicals and processes</li> <li>Implement integrated pest management and other landscape management practices</li> <li>Pursue innovative strategies — vegetated roofs</li> </ul>     | <ul style="list-style-type: none"> <li>Protect and restore habitat</li> <li>Mitigate heat island effect</li> </ul>   | <ul style="list-style-type: none"> <li>Eliminate waste, recycle and prevent pollution</li> <li>Foster markets for sustainable technologies/products</li> <li>Design-operate sustainable buildings</li> </ul>                               |
| <b>Buy recycled, buy renewable, and buy local</b>   | <ul style="list-style-type: none"> <li>High performance, sustainable buildings</li> </ul>   | <ul style="list-style-type: none"> <li>Procure bio-based, environmentally-preferable products and services — recycled content, non/less toxic alternatives</li> </ul>  | <ul style="list-style-type: none"> <li>Recycled content</li> <li>Regional materials</li> <li>Rapidly renewable materials</li> </ul>                        | <ul style="list-style-type: none"> <li>Foster markets for sustainable technologies and products</li> <li>Design-operate sustainable buildings</li> </ul>   |

NOTE: This chart is intended for general use in identifying areas of compatibility between composting, compost use and sustainability goals. Compliance with specific mandates or applicability to specific point/credit programs may differ from our interpretation or may have been modified since this document was prepared. Please consult a program specialist for updates and compliance interpretation. We are happy to provide additional information upon customer request.

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