“Mini” Anaerobic Digester—Design, Develop and Test

**Goal:** To find out whether Dry Fermentation anaerobic digestion will work on a small scale, thus give small business and homeowners a way to generate fuel (methane) and a soils amendment.

**Need:**
- A consistent source of raw material maybe a restaurant or some business that has a consistent stream of digestible waste. This is important so that we can keep a small scale unit going while we experiment with changes.
- A large garage or location we can set up our process.
- A small group of dedicated experimenters who can share time weekly to fill barrels and put them to ferment. This group will need to meet a couple of times a month to plan the process.
- A group of gardeners who will test our fermented sludge as soil amendments.
- Some raw materials to build our test units. This includes at least seven 30 - 55 gallon plastic drums, (with clamp down or screw on lids) foam insulation, scrap plywood, lumber, plumbing and a couple of pumps.

**Potential outcome:** Discover what might be digestible, how much net gas production available on a small scale, and how the input material affects the output. This could become a neighborhood project, getting together once a week with their compostable for a digester filling party and then take home their share of the compostable material.

If there is enough net gas production on this scale we will investigate household uses that we can easily clean up the raw biogas for such as hot water.

*Proposed design by Tom Anderson*