Manufactured Mini Digester:

WSU graduate students designed a Mini Digester. Several proto-types were made. One was loaned to Whatcom County for a trial.

More information about this small–scale anaerobic digester, please go to:
http://csanr.wsu.edu/pages/Small-Scale_Biogas_Technology

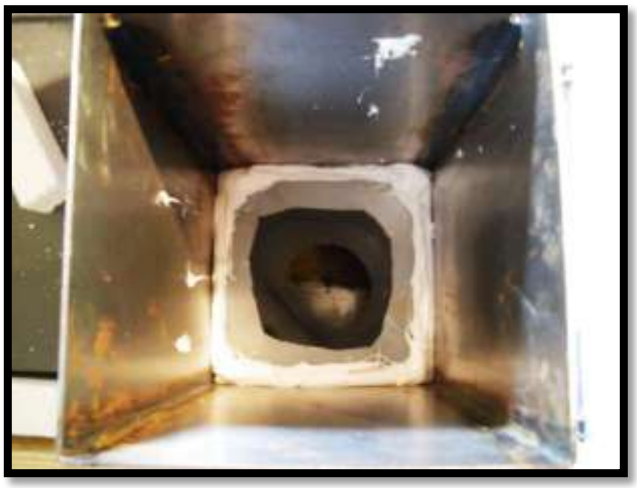
Tom pondering what to do with the unit. Right now, it is a garage based operation.

We used soil heating cable with a thermostat that goes to 110 F. You can see the cable above, looping around the side bottom. It also loops back and forth around the bottom of the unit. You can see the Styrofoam under the unit, and above that is some flexible camping mattress (blue) to help cushion the cable so it doesn't wear down.

Tom and Kay are boxing up the unit with plywood. It is secured to the bottom of the garden cart with the plywood as well.

Kay is cutting up Styrofoam. We placed approx 1 inch thick Styrofoam all around the unit, notching around nipples.

Kay is cutting up a milk jug—the bottom and the top—to be used to ensure biogas doesn't come out the chimney.



Milk jug calked in place in the chimney to stop gas leaks.

Tubing goes from the digester to an escape nipple, to an upside down bucket which is placed in a tub filled with water. The escape nipple is kept closed except when releasing gas from the upside down bucket.

At first, was not making any gas. Tom realized that the cap to the digester innards was not sealed—so had to unscrew.

Then he caulked all around the top.

Digester now being used at Bobbibrook Farm in Happy Valley. Bobbi created an efficient set up, with a sinkerator unit to help mix the manure/weed slurry for feeding the digester.