

Initial Capital Costs

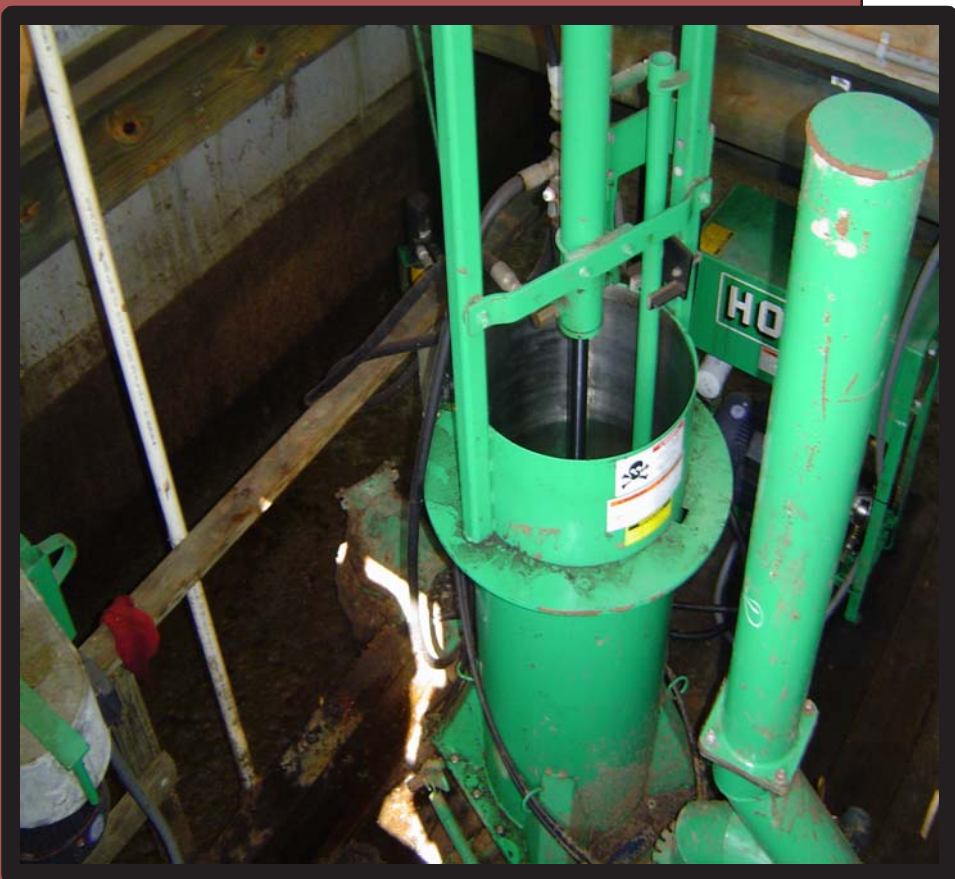
	Cost (\$)
Digester	
-Site Work	40,000
-Engineering design	105,000
-Concrete digester (Including cover, concrete, and heating pipes)	350,000
-Misc.	27,000
Subtotal	522,000
Energy conversion	
-Engine-generator set	380,000
-Electrical wiring and control systems and plumbing	145,000
-Biogas utilization building	30,000
Subtotal	555,000
Farm labor	7,500
TOTAL	1,084,500



Heat dump radiator



Long-term storage



Influent pit Houle piston pump

The farm received **FUNDING** from:

- New York State Energy and Development Authority (NYSERDA) totaling \$414,000
 - United States Department of Agriculture (USDA) totaling \$95,000
- Total public funding received represents 48% of the initial capital costs

Pump Calibration Test

To determine the efficiency of the influent pump feeding material to the digester, a pump test was performed. Influent was diverted from the digester to fill an 8,000 gallon manure spreader truck, and each load was weighed. Pump strokes were counted during each of the three trials. Density of the manure was also determined.

The volumetric pump efficiency for this pump was determined to be 64%

A pump stroke counter has been affixed to the pump to determine an accurate mass in-flow to the digester.

For more information

Download and print the Sunny Knoll Case Study at:

<http://www.manuremanagement.cornell.edu/HTMLs/CaseStudies.htm>

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