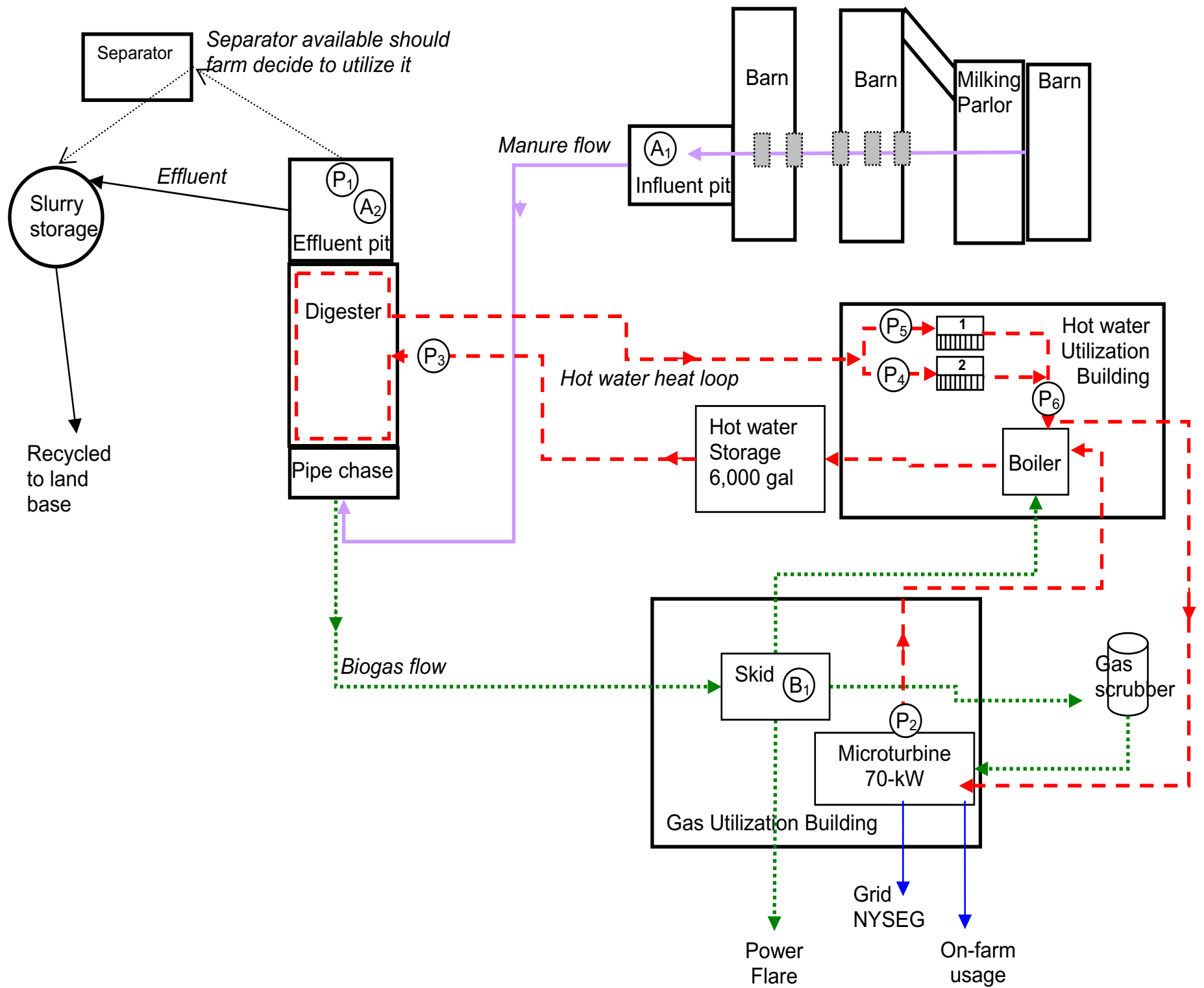


Process Description

A 7.5-Hp pump in the influent pit transfers barn effluent (raw manure + bedding) and milking center wastewater to the digester. Approximately 20,000 gallons of influent are fed into the digester each day.



6,000 gallon hot water storage tank



After digestion, effluent is transferred to a 2.9 million gallon storage tank



Alley scrapers deposit manure to central drops in freestall barns

Previous monitoring results

The following data is taken from a 2007 interim monitoring report. The complete report is available on line at:

www.manuremanagement.cornell.edu

Waste stabilization results:

Samples of influent and effluent were collected monthly from 5/2001 to 6/2002 and from 7/2003 to 4/2005

Constituent (Average values)	Influent	Effluent	Reduction by AD
Total Solids (%)	9.81	7.25	26.2 %
Total Volatile Solids ¹ (%)	8.21	5.81	29.3 %
MAP pathogen (Johnes) (cfu/gram)	330	1.5	99.1 %
Fecal Coliform bacteria (cfu/gram)	590	3.5	99.7 %

¹The more TVS consumed, the higher the biogas production

- Ortho Phosphorus concentration increased by 9%
- Ammonia (NH₃-N) concentration increased by 22.9 %

