Sunny Knoll

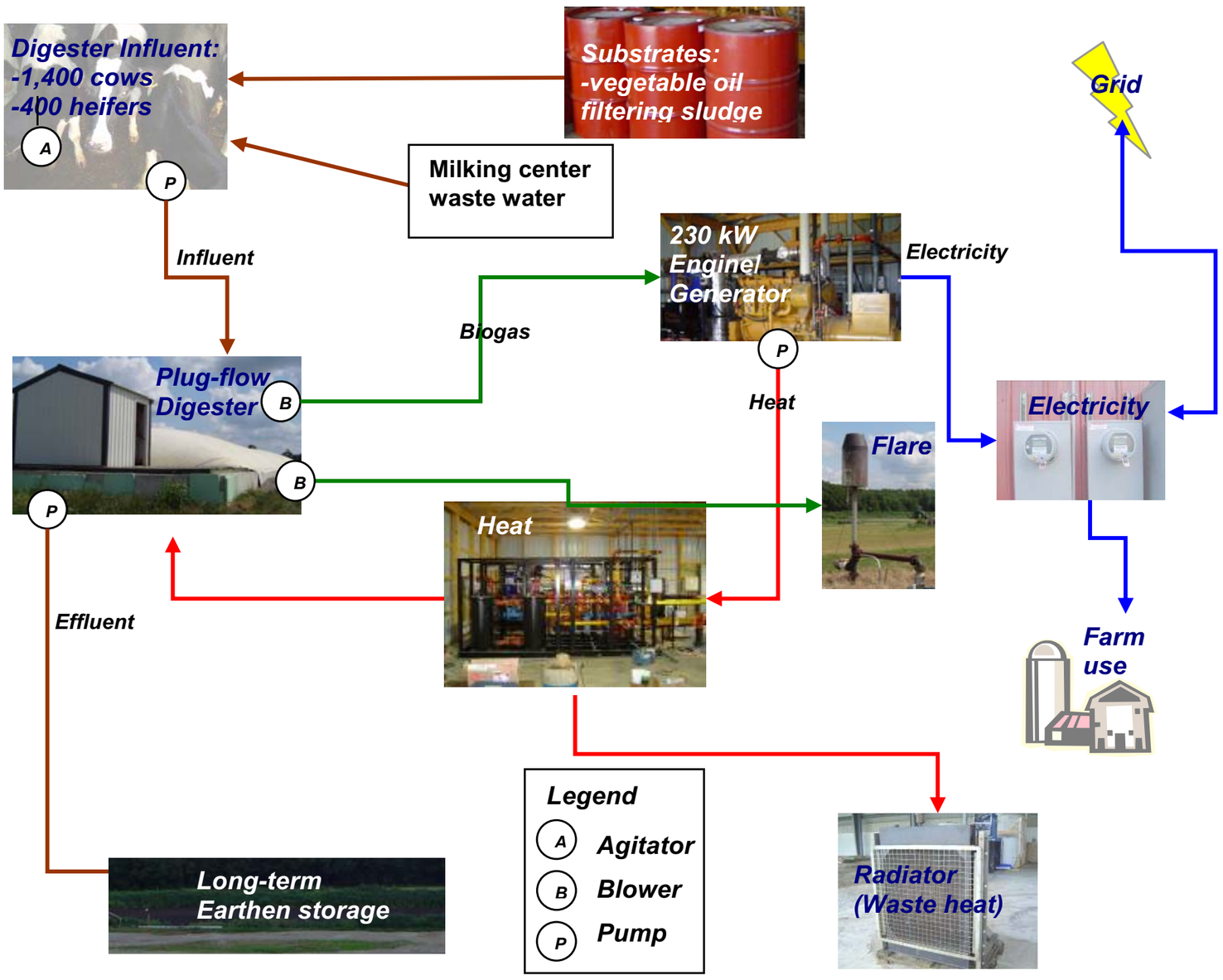
Excess biogas is flared

Water column levels in these buckets regulate the maximum biogas pressure

Digester effluent

Process Description

The digester is fed three times per day, each time for a one hour period, with a 7.5-Hp J. Houle & Fils, Inc. piston pump. A 7.5-Hp J. Houle & Fils, Inc. impeller agitator is used to blend the influent pit contents for 20 minutes prior to feeding the digester.



Benefits and Considerations

Benefits	Considerations
• Odor control • Potential revenue from: 1) Value-added products 2) Reduction of purchased energy 3) Sales of excess energy 4) Efficient use of biogas production 5) Carbon credit sales • Conversion of nutrients from organic to inorganic form, allowing them to be readily utilized by plants as a natural fertilizer, if effluent is spread at an appropriate time • Pathogen reduction	• Possible high initial capital and/or high operating costs • Long and tedious contracts with the local utility; may require special equipment for interconnection • Dedicated management of the digestion system • Careful attention to equipment maintenance and safety issues due to the characteristics of raw biogas

CORNELL PRO-DAIRY

Innovations in Agriculture

NYSERDA