



Location	Plymouth, Indiana, USA
Waste type	Liquid manure, agricultural and food industry residuals
Reactor volume	2 x 3,500 m ³ (933,000 gallons)
Electrical capacity	800 kW _e
Start-up	July 15 th , 2013
Client	Homestead Dairy, LLC

Homestead Dairy is a family-owned dairy located in Plymouth (Indiana, USA). From the manure, originating from their > 2,000 cattle population, complemented with agricultural and food industry residuals, they produce biogas in two wet digesters.

OWS co-developed the project with Homestead Dairy, Specialty Concrete Construction and Jones Petrie Rafinski Engineering. OWS is providing biochemical engineering and consulting during biogas plant construction and will support commissioning and ongoing operations. OWS is responsible for the biological start-up and follow-up of the biogas installation. OWS's laboratory evaluated multiple feedstocks to optimize biogas production and digester stability.

The biogas plant is comprised of two 3,500 m³ (933,000 gallons) digesters and will process the manure coming from two Homestead Dairy farms nearby, together with organic agricultural sidestreams (e.g. spoiled silage) and food industry by-products (e.g. DAF sludge and peppers). The biogas plant start-up started in July 2013.