What is Anaerobic Digestion?

Anaerobic digestion is the controlled decomposition of organic materials under anaerobic conditions in an anaerobic digester to produce biogas and digestate.

Biogas is the gas created by anaerobic digestion. **Digestate** is the residual solids or liquids remaining after organic material has been processed in an anaerobic digester. An **anaerobic digester** is an enclosed vessel that processes organic material under anaerobic conditions to produce biogas and digestate.

What is the difference between Anaerobic Digestion and Composting?

Composting is nature's way of recycling. It is the natural decomposition of organic material (from plants and animals) such as leaves, yard trimmings, and food waste. Anaerobic digestion is a type of composting which occurs without the presence of air.

Do I need a permit?

Yes; anaerobic digestion facilities are required to obtain a Solid Waste Handling permit according to Chapter 391-3-4-.16(1) in the Georgia Rules for Solid Waste Management. These facilities use in-vessel processing for anaerobic digestion, process category A, B, C, and/or D feedstock, and must comply with Class 6 design and operating standards according to Chapter 391-3-4-.16(5)(f). Exemptions: Facilities permitted in accordance with the Georgia Rules for Water Quality Control, which include facilities located at wastewater treatment plant and on-farm anaerobic digesters or lagoons.



GUIDANCE ON GEORGIA'S RULES FOR SOLID WASTE MANAGEMENT—ANAEROBIC DIGESTION

What is Feedstock?

Feedstock is any organic material used in the production of mulch or compost or processed in an anaerobic digester. Feedstock is further broken into specific categories and classes. Anaerobic digesters can process all categories. Feedstock from any and all categories can be fed into an anaerobic digester, which produces biogas and digestate as byproducts of anaerobic digestion.

Feedstock Category Types





Yard trimmings
Land clearing debris
Onsite agricultural
residuals
Untreated/ unpainted
wood

Category B



Offsite agricultural residuals
Herbivorous animal manure
Source-separated organics (food waste)

Category C

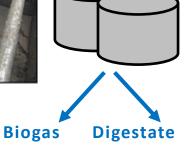


Sewage sludge Biosolids

Category D



DAF skimmings



Anaerobic Digester

What other permits to I need?

Every project is unique. It is recommended you contact other EPD branches to review your project plans to determine if other permits are needed.

Contact	EPD Branch/ Program	Phone Number	Email Address
Lena Chambless, Manager	Land Protection/Recovered Materials	(470) 251-8097	lena.chambless@dnr.ga.gov
Stephen Damaske, Manager	Air Protection/ Stationary Source Permitting Program	(404) 363-7020	stephen.damaske@dnr.ga.gov
Veronica Craw, Manager	Watershed Protection/ Nonpoint Source Program	(470) 938-3384	veronica.craw@dnr.ga.gov
Audra Dickson, Manager	Watershed Protection/ Wastewater Regulatory Program	(470) 524-0726	audra.Dickson@dnr.ga.gov
Whitney Fenwick, Manager	Watershed Protection/ Industrial Permitting Unit	(470) 607-3078	whitney.fenwick@dnr.ga.gov