



Office of Land Quality

Indiana Biomass Digesters

Three Operational Arrangements for Biomass Digester in Indiana

1. Stand alone - not adjacent or physically connected to CFO)
2. On site CFO – production area
3. Co-located - on land adjacent to CFO production area



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What is a CFO?

- Cow (Calf, Dairy, Cattle) \geq 300
- Pigs (Growers, Nursery, Sows, Finishers) \geq 600
- Poultry (Layers, Broilers, Turkey, Ducks) \geq 30,000*
- Horse \geq 500
- Sheep/Lambs \geq 600

* Ducks with liquid manure system \geq 5000



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What to Consider:

Meet with regulatory programs first to begin a dialog on type of permit needed and expectations based on how you intend to operate.

- Will other biomass or feedstocks be used in the process?
- How will these be managed?
- How will the digester's operation fit into IDEM's regulations?
- Don't forget to contact the Office of Air Management to see if you need a permit.



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Onsite CFO

- Must be part of the CFO permit
- Will be inspected by CFO Program
- All waste management processes will need to have approval prior to construction
- Manure only or Biomass used may land apply according to 327 IAC 19
- If accepting Feedstock other than Manure may need to have an approval from the bio solid program and digestate will be handled and land applied under 327 IAC 6.1 regulations
- All records become part of farm operating record



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Stand Alone

- The digester is a SW processing unit and subject to registration 329 IAC 11.5.
- Must have proof of financial assurance on file at IDEM prior to operation.
- May need a Satellite Manure Storage Structure (SMSS) for manure accumulation on site prior to introduction to digester and would be subject to 327 IAC 20.



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Stand Alone

- May require specific standards for storage of feedstocks prior to introduction to the digester.
- Any storage unit for digestate will require approval prior to construction and must meet PE certification standards prior to use.
- If digestion uses feedstocks, the land application must be done according to 327 IAC 6.1



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Co-located to the CFO

What is the conveyance system for the manure?

- Any construction related to transferring manure to and from the digester for storage must be approved prior to use.
- Will the digester accept feedstocks? If yes, the CFO will need to land apply according to 327 IAC 6.1 and have any applicable license or permit prior to accept or market the digestate.
- CFO may be required to comply with special permit conditions required by the agency for those portions of the operation that are put in place for the digester on the production site.



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Co-located to the CFO

- Any manure that is sent to the digester must meet the marketing requirements of the 327 IAC 19.
- CFO's will be expected to manage any digestate that is returned to a manure management system in accordance with 327 IAC 19 or any special conditions in their permit.
- Digester – must operate in compliance 329 IAC 11.5



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Co-located to the CFO

- Any manure storage structure on site at digester may be subject to the SMSS rule 327 IAC 20.
- If the digester receives feedstocks they must be in compliance with 327 IAC 6.1.
- Digester will be required to land apply digestate according to 327 IAC 6.1 if digester utilizes feedstocks. This will be part of special conditions in the CFO permit.



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Program Contact Information

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