Compost Site Selection

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What are we doing?

"Composting manure is a process in which animal feces, urine, and bedding are stacked, turned, and managed in a way that promotes decomposition."

> C. Modderman, Animal Manure: Production, Characteristics, Environmental Concerns, and Management, Volume 67, Jan. 09, 2020









Why does it matter?

- Manure and compost contain valuable nutrients plants need. If the nutrients are not used they become a pollutant and are wasted.
- Improper manure storage and land application
 - Excess soil nutrients
 - Surface runoff
 - Leachate
 - Water contaminated with manure



Harmful algal bloom. Photo courtesy: NDDEQ.







Selecting a composting site



- Depends on your individual state regulations.
- What are the manure stacking/stockpiling guidelines?
 - Temporary (days)
 - Short-term (months)
 - Long-term (permanent)





In general...

- Temporary (days)
 - Will not be used for composting but may be used for moving compost to a field edge for spreading
- Short-term (months)
 - May best fit a smaller volume operation
 - Allows for quick composting site
 - Moved to a different location each year
- Long-term (permanent)
 - Best for large volume operation
 - Consistent and continuous composting site







Soil type

- Sandy soils have rapid permeability that allows nitrate to move quickly through the soil to ground water (leaching), while loamy or clayey soils have slower permeability that helps retain nitrate in the soil profile.
- Sinkholes, caves and rock outcroppings likely lead to groundwater contamination
- Depth to ground water and location of surface water





General rules of thumb

May **NOT** be located:

- In gravel pits, sand pits, rock quarries or any other excavation areas
- Along streams, lakes or shorelines
- Within a flood plain or near a sinkhole
- Within *specific* feet of a private water supply well, public water supply well or watertight casing





Other concerns



 Take into account neighboring residences and prevailing wind direction when selecting sites (1/2 mile good rule of thumb)

 Depending on your operation size, there may be concerns about type of equipment going to and coming from your site.











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Thank you!

