

Air Issues Associated with Animal Agriculture: A North American Perspective

Air emissions associated with animal agriculture <u>consist of odorous and gaseous compounds</u> and particulate matter associated with manure and animal management.

- Air quality associated with animal agriculture has historically been unregulated or minimally regulated.
- State and local governments have begun to enact regulations to minimize the impact of air emissions.
- The Environmental Protection Agency is increasing its efforts to ensure that air emissions from agriculture meet environmental standards.

The practice of <u>production site manure storage</u> creates an emission source of odors, gases, particulates, and bioaerosols.

- The type of storage varies depending on species and region of the country.
- All manure storage options affect the farm's overall air quality and emissions.
- Land application of manure has the potential to be the largest emitter of air pollutants from animal production systems.



Greenhouse gases from livestock production are primarily from enteric fermentation and manure management.

- The U.S. manure management system is high in greenhouse gas emissions because most pork manure and half of the dairy manure is stored wet rather than dry.
- Methane emissions that come from manure storage structures can be captured and destroyed by using covers and digesters on large facilities.
- Benefits must be identified or costs must come down in order for methane digesters to be voluntarily adapted.

Most studies indicate that <u>large livestock production facilities</u> lower the value of residences within three miles of the facility.

- Studies also indicate that these businesses increase economic activity in the county and state.
- Political actions try to balance the competing positive and negative impacts of any business.
- A combination of regulatory and market forces is causing a shift in the way manure is stored and land applied.

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