

## Jennifer Shinabery

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**From:** Nathan Bilger  
**Sent:** Monday, January 22, 2018 11:15 AM  
**To:** Jennifer Shinabery  
**Subject:** FW: CAFO committee - Odor

**From:** Joan Null [mailto:jknnull@embarqmail.com]  
**Sent:** Friday, January 19, 2018 2:14 PM  
**To:** Nathan Bilger <wcplanning@whitleygov.com>  
**Subject:** CAFO committee - Odor

Odor findings thus far --

3 main sources of air quality issues from feeding operations:

- ventilation stacks of the barns - generating approximately 30% of odor complaints
- manure lagoons - generating approximately 20% of odor complaints
- manure spread on fields - generating approximately 50% of all odor complaints

Agriculture is exempt under the Clean Air Act from having to comply with air quality standards and IDEM's CFO rule also lacks any regulatory limits on air pollution from CAFOs/CFOs.

Ten states have regulations directly limiting odor emissions from CAFOs. Thirty-four other states have some regulation designed to curtail odor emissions without explicit limitations. Generally used are setback distances along with general and individual permitting processes that mandate environmentally-responsible manure management.

Purdue University's Agricultural Air Quality Laboratory has developed an interesting "Livestock Odor Setback Model" -- enter the variables and it will give appropriate setback for odor

overview of model - <https://engineering.purdue.edu/~odor/setback.htm>

instruction manual -

<https://engineering.purdue.edu/~odor/Purdue%20Setback%20Model%20Manual%20-%2006-23-15.pdf>

I also came across a Purdue University Overview of Confined Feeding Regulations in Indiana Counties:

<https://www.cdext.purdue.edu/wp-content/uploads/2016/03/CFO-Final-Report-Overview-January-2016.pdf>

"In May of 2015, Purdue Extension was commissioned by the State of Indiana to study Indiana county zoning ordinances as they apply to confined feeding operations. Of the 81 Indiana counties operating with a zoning ordinance, 64 zoning ordinances currently (November 2015) contain standards, regulations, or language specific to CFOs."

Interesting section of Indiana Code:

**IC 36-7-4-601 Zoning ordinance; powers and duties of legislative body**

Sec. 601. (a) The legislative body having jurisdiction over the geographic area described in the zoning ordinance has exclusive authority to adopt a zoning ordinance under the 600 series. However, no zoning ordinance may be adopted until a comprehensive plan has been approved for the jurisdiction under the 500 series of this chapter.

(b) When it adopts a zoning ordinance, the legislative body shall:

- (1) designate the geographic area over which the plan commission shall exercise jurisdiction; and
- (2) incorporate by reference into the ordinance zone maps, as prepared by the plan commission under subsection (e).

(c) When it adopts a zoning ordinance, the legislative body shall act for the purposes of:

- (1) **securing adequate** light, **air**, convenience of access, and safety from fire, flood, and other danger;
- (2) lessening or avoiding congestion in public ways;
- (3) **promoting the public health**, safety, comfort, morals, convenience, and general welfare; and
- (4) otherwise accomplishing the purposes of this chapter.

(d) For the purposes described in subsection (c), the legislative body may do the following in the zoning ordinance:

- (1) Establish one (1) or more districts, which may be for agricultural, commercial, industrial, residential, special, or unrestricted uses and any subdivision or combination of these uses. A district may include geographic areas that are not contiguous. A geographic area may be subject to more than one (1) district.

(2) In each district, regulate how real property is developed, maintained, and used.

This regulation may include:

(A) requirements for the area of front, rear, and side yards, courts, other open spaces, and total lot area;

(B) requirements for site conditions, signs, and nonstructural improvements, such as parking lots, ponds, fills, landscaping, and utilities;

(C) provisions for the treatment of uses, structures, or conditions that are in existence when the zoning ordinance takes effect;

(D) restrictions on development in areas prone to flooding;

(E) requirements to protect the historic and architectural heritage of the community;

(F) requirements for structures, such as location, height, area, bulk, and floor space;

(G) restrictions on the kind and intensity of uses;

(H) **performance standards for the emission of noises, gases, heat, vibration, or particulate matter into the air or ground or across lot lines;**

(I) standards for population density and traffic circulation; and

(J) any other provisions that are necessary to implement the purposes of the zoning ordinance.

(3) Designate zoning districts in areas having special development problems or needs for compatibility in which a plan commission shall:

(A) approve or disapprove development plans under the 1400 series of this chapter; and

(B) ensure that a development plan approved under this subdivision is consistent with the comprehensive plan and the development requirements specified in the zoning ordinance.

(4) Provide for planned unit development through adoption and amendment of zoning ordinances, including PUD district ordinances (as defined in section 1503 of this chapter).

(5) Establish in which districts the subdivision of land may occur.

(e) When it prepares a proposal to initially adopt a zoning ordinance for a jurisdiction, the plan commission shall also prepare zone maps. The purpose of the zone maps is to indicate the districts into which the incorporated areas and unincorporated areas, if any, are divided.

[Pre-Local Government Recodification Citations: 18-7-2-38; 18-7-2-41 part; 18-7-4-601; 18-7-4-46; 18-7-5-58 part.]

As added by Acts 1981, P.L.309, SEC.23. Amended by Acts 1982, P.L.212, SEC.2; P.L.355-1983, SEC.1; P.L.335-1985, SEC.15; P.L.220-1986, SEC.15; P.L.320-1995, SEC.6.

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*Joan Null*