

To achieve effective agricultural zoning, several tools must be used in conjunction. The following tools are used throughout the model agricultural zoning ordinances published by the Indiana Land Resources Council:

Odor Setback Guidelines

Odor control is a major concern of local government in regulating livestock facilities. The use of atmospheric air to dilute odors from livestock facilities by appropriate setback distances is still the most popular and cost-effective strategy to reduce odor nuisance. However, the determination of science-based odor setbacks for livestock facilities is a difficult and complex problem with only limited supporting data.

A simple-to-use, site-specific setback guideline was developed by Purdue University for swine production systems. This guideline considers facility size, orientation and shape, wind frequency, land use, topography, building design and management, manure handling characteristics, and odor abatement effectiveness. Odor emission factors were based in part on actual odor emission measurements from livestock buildings.

The Odor Setback Guideline can be accessed from the Purdue Agricultural Air Quality Laboratory (PAAQL) website: <http://pasture.ecn.purdue.edu/~odor/setback.html>.

Reciprocal Separation Distance

When a community is revising its agricultural zoning ordinance, provisions for non-conforming agricultural and residential uses are critical. Traditionally, a separation distance has been established for proximity of a new livestock facility to an existing residence. This is important and has been utilized throughout the model ordinances. The reciprocal separation distance includes an additional requirement for the proximity of a new residence to an existing livestock facility. This is an effective tool to protect non-conforming, pre-existing uses of land and to minimize the potential for conflicting land uses.

Agricultural Clause

A key principal of effective zoning regulation is promoting notification. An agricultural clause has the advantage of putting individuals who are moving to an agricultural zone on notice that they may experience noise, dust, and odor associated with generally accepted farming practices. This can be used as a condition to a permitted use, or in conjunction with a special exception for residential development in an ag zone.

It is important to note that use of an agricultural clause does not preclude the ability of a landowner to sue for nuisance. The landowner can still file a nuisance action and the presiding judge takes the agricultural clause under consideration. The judge will determine whether the farm operator has been negligent. In making this determination, the judge will consider whether that operator is engaging in generally accepted farming practices in compliance with applicable regulations. Several states have used the agricultural clause as an effective notification tool.

Examples of ordinances that implement these tools can be found in the Indiana Land Resource Council's publication, *A Guide for Local Land Use Planning: Model Agricultural Zoning Ordinances*, available through the Indiana State Department of Agriculture and at www.in.gov/isda.