

Sample Zoning Language For Animal Feeding Operations in Michigan

What is presented here is sample zoning language for intensive animal agriculture operations. The zoning amendment adopted by a municipality will be modified to fit the codification of that particular zoning ordinance. A municipality will want to modify it further to fit their local needs. This sample is presented as a starting point, not a finished product. Prior to adoption, the ordinance should be reviewed by the municipal attorney.

The sample language is provided here with the following assumptions:

- The municipality already has site plan review requirements in its ordinance, which includes pre-review of the site plan by other agencies for their respective permit approval.
- The municipality already has non-conforming use provisions in its ordinance.
- The municipality already has special use procedures in its ordinance.
- The municipality already has conditional use procedures in its ordinance.
- The section numbering system follows a standard system of codification.

The language provided here includes more regulation than might be adopted in any given municipality. This is done to provide examples of several different approaches that a municipality might consider.

Before it is adopted, modifications should be made so the zoning text fits with the municipality's zoning ordinance. The draft should then be reviewed by a planner (consultant, county or regional planning staff, Michigan State University Extension Land Use Area of Expertise team member). Last (and most important) the draft should be reviewed by the municipality's attorney. A zoning amendment should never be adopted without review by the municipality's attorney.

September 23, 1999; Draft.

1. Add definition of uses by adding to Section 505, as follows:

ANIMAL FEEDING OPERATION means a lot or building or combination of contiguous lots and buildings where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12 month period, where manure may accumulate, and where the concentration of animals is such that vegetative cover or post-harvest residues cannot be maintained within the enclosure during the normal growing season.

ANIMAL UNIT means a unit of measurement for any animal feeding operation calculated by adding the following numbers: the number of slaughter and feeder cattle multiplied by 1.0, plus the number of mature dairy cattle multiplied by 1.4, plus the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4, plus the number of sheep multiplied by 0.1, plus the number of horses multiplied by 2.0 plus all other animals on site multiplied by 1.0.

<i>Comment: These definitions of animal feeding operation and animal unit are the definitions used in the EPA Clean Water Act regulations.</i>
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ANIMAL WASTE AREA means a holding area or lagoon used or intended to be used for the storage or treatment of animal manure and other waste products associated with an animal feeding operation.

AGRICULTURE, ANIMAL means the use of land for the maintenance or production of animals or animal products but does not include animal feeding operations.

AGRICULTURE, CROP means the use of land for the production of row crops, field crops, tree crops, timber, bees, apiary products, and fur-bearing animals.

AGRICULTURAL SALES AND SERVICE means an establishment primarily engaged in the sale or rental of farm tools and small implements, feed and grain, tack, animal care products, farm supplies and the like, excluding large implements, and including accessory food sales and machinery repair services.

AGRICULTURAL STORAGE means facilities for the warehousing of agricultural products. Typical uses include grain elevators.

2. Add or replace in its entirety Article 31, as follows:

ARTICLE 31: LIMITED AGRICULTURE DISTRICT

3101. Purpose:

The Limited Agriculture District is intended to help preserve existing agricultural land resources with provisions for some single family dwelling development and prevent the premature conversion of rural lands to urban use. The district's use and development regulations are designed to implement the *Comprehensive Plan* goals by discouraging urban and suburban development in areas that have prime agricultural soils and that are not well served by public facilities and services. This district can also be used as a transitional zoning designation to buffer residential uses from more intensive, general agriculture districts.

Comment: Purpose statements should tie zoning district provisions back to the Comprehensive Plan and explain the intent of the district. Then property owners and public officials will be given an indication of what a district is intended to do and where it is intended to be applied (mapped).

3102. Permitted Uses:

Only the following uses shall be permitted, by permit as specified in Section 8401 of this Ordinance:

- A. Agriculture (animal and crop), Forestry and Fishing & Hunting [11] (EXCEPT Animal Feeding Operation) including, but not limited to the following accessory uses:
 1. Dwellings, Duplexes, and Apartment Buildings for owners, operators and employees of a farm.
 2. Home Occupation.
 3. Parking for currently licensed automobiles.
 4. On lakefront lots, one boat dock for private use.
 5. Wholesale Fresh Fruits and Vegetables Wholesalers [44523].
 6. Fruit and Vegetable Markets [44523].
 7. Farm Product Warehousing and Storage [49313].
 8. Refrigerated Warehousing and Storage [49312].

3103. Conditional Uses:

Only the following uses shall be permitted, by conditional use permit as specified in Section 8501 of this Ordinance:

- A. Dwellings, Duplexes if on a parcel which is larger than _____ square feet and smaller than _____ square feet and the parcel has _____ feet of road frontage, other parcel size standards of this zoning district notwithstanding, not located within _____ feet of an Animal Feeding Operation or its animal waste area, and no more than four parcels are split from the original parcel of record which exists on

the effective date of this amendment and including but not limited to the following accessory uses:

1. Home Occupation.
2. Parking for currently licensed automobiles.
3. On lakefront lots, one boat dock for private use.

Comment: A minimum parcel size of 20,000 square feet would satisfy, for sandy soils, all setback and isolation distances required for on-site well and septic systems. A maximum parcel size of 43,560 square feet (1 acre) should be small enough to avoid excessive removal of land from agricultural production.

Comment: The sample Limited Agriculture District presented here does not allow animal feeding operations. However, animal feeding operations might be included as a special use. The Conditional Agriculture District presented below follows this convention.

Comment: In this example, non-farm dwellings are permitted as a conditional use. Not all jurisdictions will want to follow this approach. Some will want to prohibit all non-farm residential development within agricultural zoning districts. (This example is modeled in the Exclusive Agriculture District presented below.) Others may decide to permit such uses by right.

3104. Use Regulations and Standards

The following regulations shall apply to all Permitted, Conditional and Special Uses in this District:

- A. Minimum Parcel Area - No building, structure or use shall be established on any parcel less than _____ square feet. No apartment building shall be established on any parcel less than _____ square feet per each housing unit, whichever parcel is greater.

Comment: The minimum parcel area provision is suggested as a way of establishing some minimum requirement for allowed nonresidential uses within the district. It is recognized that minimum lot size requirements that apply to non-farm uses are an ineffective and sometimes counterproductive technique for preserving prime farmland. In fact, large-lot zoning can do more harm than good when it comes to farmland protection. By spreading development throughout the countryside, large-lot zoning can result in a waste of land and an increase in environmental problems. In this example the parcel area applies only to the permitted uses in section 3102. Small parcels are required for the non-farm conditional uses in section 3103.

- B. Buildable Area - Each parcel shall have a minimum of _____ square foot buildable area per principle unit, which shall not include:
1. sand dune with slopes greater than 18 percent,
 2. beach contiguous to a lake or stream,
 3. wetland,
 4. area which is not accepted by the Health Department of jurisdiction for on-site sewage disposal unless an alternate system of sewage disposal is approved by the Health Department of jurisdiction,
 5. high risk erosion area,
 6. that part of a flood plain where flood waters are expected to have a destructive current,
 7. existing public utility easements,
 8. existing public rights-of-way,
 9. waterfront setback areas, and
 10. slopes over 25 percent.
- C. Minimum Parcel Width - Parcel width shall be no less than _____ feet and it shall front on a public road.
- D. Minimum Setback Requirements:
1. The following requirements shall apply to every parcel, building, structure or use:
 - a. Front Yard - The minimum front setback shall not be less than _____ feet from the front property line, or _____ feet from the centerline of the road, whichever is greater.

Comment: The setback distance is based on measurements of the distance snow is thrown back from the edge of a county-plowed road by snow plows; an average of fourteen (14) meters (46 feet) and a mean maximum twenty five (25) meters (82 feet) from the centerline of the road.

- b. Rear Yard - The minimum rear setback shall not be less than _____ feet.
- c. Waterfront Yard: See section 1011 of this Ordinance.
- d. When a proposed non-residential or non-park use is contiguous to any dwelling, the parcel owner of the proposed use shall establish one of the following buffers on his/her parcel adjacent to, and along the contiguous boundary of the parcel on which the dwelling is located:
 - 1) a buffer area (setback) of fifty (50) feet, or
 - 2) a berm four (4) feet, or more high, or
 - 3) a solid wall four (4) feet, or more, in height, or
 - 4) a proportionately adjusted combination of the above.

Comment: Zoning district setback requirements should not be confused with use-specific separation standards. Setbacks are primarily useful as a means of protecting adjacent rights-of-way and lots from encroachment by buildings and structures. Although many agricultural zoning districts require that buildings be set back 50 to 100 feet from lot lines, there is no magic setback distance. Sample use-specific separation standards are presented in Sec. 16__ (p. SZL-12).

2. No dwelling shall be constructed in this District which contains less than _____ square feet of floor area, or is less than _____ feet wide.
3. No accessory building shall be constructed in this District which contains more than _____ square feet of building area, or is more than _____ feet high.

3. Add or replace in its entirety Article 32, as follows:

ARTICLE 32: CONDITIONAL AGRICULTURE DISTRICT

3201. Purpose:

The Conditional Agriculture District is intended to help preserve existing agricultural land resources and prevent the premature conversion of rural lands to urban use. The district's use and development regulations are designed to implement the *Comprehensive Plan* goals by discouraging urban and suburban development in areas that have prime agricultural soils and that are not well served by public facilities and services while at the same time permitting dwellings and animal feeding operations to exist under certain conditions.

3202. Permitted Uses:

Only the following uses shall be permitted, by permit as specified in Section 8401 of this Ordinance:

- A. Agriculture (animal and crop), Forestry and Fishing & Hunting [11] (EXCEPT Animal Feeding Operation) including, but not limited to the following accessory uses:
 1. Dwellings, Duplexes, and Apartment Buildings for owners, operators and employees of a farm.
 2. Home Occupation.
 3. Parking for currently licensed automobiles.
 4. On lakefront lots, one boat dock for private use.
 5. Wholesale Fresh Fruits and Vegetables Wholesalers [42248].
 6. Fruit and Vegetable Markets [44523].
 7. Farm Product Warehousing and Storage [49313].
 8. Refrigerated Warehousing and Storage [49312].

3203. Conditional Uses:

Only the following uses shall be permitted, by Conditional use permit as specified in Section 8501 of this Ordinance:

- A. Dwellings, Duplexes if on a parcel which is larger than ____ square feet and smaller than ____ square feet and the parcel has ____ feet of road frontage, other parcel size standards of this zoning district notwithstanding, not located within ____ feet of an Animal Feeding Operation or its animal waste area, and no more than four parcels are split from the original parcel of record which exists on the effective date of this amendment and including but not limited to the following accessory uses:
1. Home Occupation.
 2. Parking for currently licensed automobiles.
 3. On lakefront lots, one boat dock for private use.

Comment: A minimum parcel size of 20,000 square feet would satisfy, for sandy soils, all setback and isolation distances required for on-site well and septic systems. A maximum parcel size of 43,560 square feet (1 acre) should be small enough to avoid excessive removal of land from agricultural production.

Comment: In this example, non-farm dwellings are permitted as a conditional use. Not all jurisdictions will want to follow this approach. Some will want to prohibit all non-farm residential development within agricultural zoning districts. (This example is modeled in the Exclusive Agriculture District presented below.) Others may decide to permit such uses by right.

Comment: Animal feeding operations are included as special land uses (below), but they might, alternatively, be included as conditional uses.

3204. Special Uses:

Only the following uses shall be permitted, by Special Use Permit as specified in 8601 of this Ordinance:

- A. Animal Feeding Operation.
- B. Preserved Fruits and Vegetables Manufacturing [203].
- C. Mining [212].
- D. Utilities [22].
- E. Wholesale Fresh Fruits and Vegetables Wholesalers [42248].
- F. Fruit and Vegetable Markets [44523].
- G. Farm Product Warehousing and Storage [49313].
- H. Refrigerated Warehousing and Storage [49312].
- I. Telecommunications [5133] including antenna towers.
- J. Accessory uses to the above.

3205. Use Regulations and Standards

The following regulations shall apply to all Permitted, Conditional and Special Uses in this District:

- A. Minimum Parcel Area - No building, structure or use shall be established on any parcel less than _____ square feet. No apartment building shall be established on any parcel less than _____ square feet per each housing unit, whichever is greater.

Comment: The minimum parcel area provision is suggested as a way of establishing some minimum requirement for allowed nonresidential uses within the district. It is recognized that minimum lot size requirements that apply to non-farm uses are an ineffective and sometimes counterproductive technique for preserving prime farmland. In fact, large-lot zoning can do more harm than good when it comes to farmland protection. By spreading development throughout the countryside, large-lot zoning can result in a waste of land and an increase in environmental problems. In this example the parcel area applies only to the permitted uses in section 3102. Small parcels are required for the non-farm conditional uses in section 3103.

- B. Buildable Area - Each parcel shall have a minimum of _____ square foot buildable area per principle unit, which shall not include:
1. sand dune with slopes greater than 18 percent,
 2. beach contiguous to a lake or stream,
 3. wetland,
 4. area which is not accepted by the Health Department of jurisdiction for on-site sewage disposal unless an alternate system of sewage disposal is approved by the Health Department of jurisdiction,
 5. high risk erosion area,
 6. that part of a flood plain where flood waters are expected to have a destructive current,
 7. existing public utility easements,
 8. existing public rights-of-way,
 9. waterfront setback areas, and
 10. slopes over 25 percent.
- C. Minimum Parcel Width - Parcel width shall be no less than _____ feet and it shall front on a public road.
- D. Minimum Setback Requirements:
1. The following requirements shall apply to every parcel, building, structure or use:
 - a. Front Yard - The minimum front setback shall not be less than _____ feet from the front property line, or _____ feet from the centerline of the road, whichever is greater.

Comment: The setback distance is based on measurements of the distance snow is thrown back from the edge of a county-plowed road by snow plows; an average of fourteen (14) meters (46 feet) and a mean maximum twenty five (25) meters (82 feet) from the centerline of the road.

- b. Rear Yard - The minimum rear setback shall not be less than _____ feet.
- c. Waterfront Yard: See section 1011 of this Ordinance.
- d. When a proposed non-residential or non-park use is contiguous to any dwelling, the parcel owner of the proposed use shall establish one of the following buffers on his parcel adjacent to, and along the contiguous boundary of the parcel on which the dwelling is located:
 - 1) buffer area (setback) of fifty (50) feet, or
 - 2) a berm four (4) feet, or more high, or
 - 3) a solid wall four (4) feet, or more, in height, or
 - 4) a proportionately adjusted combination of the above.

Comment: Zoning district setback requirements should not be confused with use-specific separation standards. Setbacks are primarily useful as a means of protecting adjacent rights-of-way and lots from encroachment by buildings and structures. Although many agricultural zoning districts require that buildings be set back 50 to 100 feet from lot lines, there is no magic setback distance. Sample use-specific separation standards are presented in Sec. 16__ (p. SZL-12).

- 2. No dwelling shall be constructed in this District which contains less than _____ square feet of floor area, or is less than _____ feet wide.
 - 3. No accessory building shall be constructed in this District which contains more than _____ square feet of building area, or is more than _____ feet high.
5. Add or replace in its entirety Article 33, as follows:

ARTICLE 33: EXCLUSIVE AGRICULTURE DISTRICT

3301. Purpose:

The Exclusive Agriculture District is intended to help preserve existing agricultural land resources and prevent the premature conversion of rural lands to urban use by emphasizing large-scale, intensive agricultural operations and not permitting non-farm dwellings in the district. The district's use and development regulations are designed to implement the *Comprehensive Plan* goals by discouraging urban and suburban development in areas that have prime agricultural soils and that are not well served by public facilities and services.

Comment: Exclusive agricultural zoning is not widely used in Michigan. While exclusive agricultural zoning will not prevent conflicts between agricultural land uses and existing non-agricultural uses, it is the most effective method of preventing encroachment of new non-agricultural land uses, and the associated potential for additional conflict, into agricultural areas.

3302. Permitted Uses:

Only the following uses shall be permitted, by permit as specified in Section 8401 of this Ordinance:

- A. Agriculture (animal, crop) Forestry and Fishing & Hunting [11]
 - 1. Dwellings, Duplexes, and Apartment Buildings for owners, operators and employees of a farm.
 - 2. Home Occupation.
 - 3. Parking for currently licensed automobiles.
 - 4. On lakefront lots, one boat dock for private use.
 - 5. Wholesale Fresh Fruits and Vegetables Wholesalers [42248].
 - 6. Fruit and Vegetable Markets [44523].
 - 7. Farm Product Warehousing and Storage [49313].
 - 8. Refrigerated Warehousing and Storage [49312].
- B. Animal Feeding Operation.
- C. Preserved Fruits and Vegetables Manufacturing [203].
- D. Wholesale Fresh Fruits and Vegetables Wholesalers [42248].
- E. Fruit and Vegetable Markets [44523].
- F. Farm Product Warehousing and Storage [49313].
- G. Refrigerated Warehousing and Storage [49312].
- H. Accessory uses to the above.

3303. Use Regulations and Standards

The following regulations shall apply to all Permitted, Conditional and Special Uses in this District:

- A. Minimum Parcel Area - No building, structure or use shall be established on any parcel less than _____ square feet.

Comment: The minimum parcel area provision is suggested as a way of establishing some minimum requirement for allowed nonresidential uses within the district. It is recognized that minimum lot size requirements that apply to non-farm uses are an ineffective and sometimes counterproductive technique for preserving prime farmland. In fact, large-lot zoning can do more harm than good when it comes to farmland protection. By spreading development throughout the countryside, large-lot zoning can result in a waste of land and an increase in environmental problems. In this example the parcel area applies only to the permitted uses in section 3102. Small parcels are required for the non-farm conditional uses in section 3103.

- B. Buildable Area - Each parcel shall have a minimum of _____ square foot buildable area per principle unit, which shall not include:
1. sand dune with slopes greater than 18 percent,
 2. beach contiguous to a lake or stream,
 3. wetland,
 4. area which is not accepted by the Health Department of jurisdiction for on-site sewage disposal unless an alternate system of sewage disposal is approved by the Health Department of jurisdiction,
 5. high risk erosion area,
 6. that part of a flood plain where flood waters are expected to have a destructive current,
 7. existing public utility easements,
 8. existing public rights-of-way,
 9. waterfront setback areas, and
 10. slopes over 25 percent.
- C. Minimum Parcel Width - Parcel width shall be no less than _____ feet and it shall front on a public road.
- D. Minimum Setback Requirements:
1. The following requirements shall apply to every parcel, building, structure or use:
 - a. Front Yard - The minimum front setback shall not be less than _____ feet from the front property line, or _____ feet from the centerline of the road, whichever is greater.

Comment: The setback distance is based on measurements of the distance snow is thrown back from the edge of a county-plowed road by snow plows: an average of fourteen (14) meters (46 feet) and a mean maximum twenty five (25) meters (82 feet) from the centerline of the road.

- b. Rear Yard - The minimum rear setback shall not be less than _____ feet.
- c. Waterfront Yard: See section 1011 of this Ordinance.
- d. When a proposed non-residential or non-park use is contiguous to any dwelling, the parcel owner of the proposed use shall establish one of the following buffers on his parcel adjacent to, and along the contiguous boundary of the parcel on which the dwelling is located:
 1. a buffer area (setback) of fifty (50) feet, or
 2. a berm four (4) feet, or more high, or
 3. solid wall four (4) feet, or more, in height, or
 4. a proportionately adjusted combination of the above.

Comment: Zoning district setback requirements should not be confused with use-specific separation standards. Setbacks are primarily useful as a means of protecting adjacent rights-of-way and lots from encroachment by buildings and structures. Although many agricultural zoning districts require that buildings be set back 50 to 100 feet from lot lines, there is no magic setback distance. Sample use-specific separation standards are presented in Sec. 16__ below.

2. No dwelling shall be constructed in this District which contains less than _____ square feet of floor area, or is less than _____ feet wide.
3. No accessory building shall be constructed in this District which contains more than _____ square feet of building area, or is more than _____ feet high.

6. Add specific special use standards by adding a section 16 __ to Article 16, as follows:

16__ Animal Agriculture and Animal Feeding Operations

Animal Agriculture and Animal Feeding Operations uses shall be subject to the following land use standards:

- A. Shall comply with all applicable local, state and federal standards including, for example, the Federal Clean Water Act (being P.L. 92-500 of 1972, as amended, 33 USCS 1251 *et seq*), Point source pollution control parts of the Michigan Natural Resources and Environmental Protection Act (being parts 31-53 of P.A. 451 of 1994, as amended, M.C.L. 324.3101-324.5399), and the most recent Generally Accepted Agricultural Management Practices, published and adopted by the Michigan Commission of Agriculture pursuant to the Michigan Right to Farm Act (being P.A. 93 of 1981, as amended, M.C.L. 286.471 *et seq*).

Comment: The sample zoning provisions presented here would supplement, not replace, other state or federal regulations and standards that apply to animal agriculture. This provision attempts to make that clear. When this program is included in the zoning ordinance, enforcement is the responsibility of the township.

- B. Animal feeding operations and animal waste areas shall comply with the following minimum setback standards:

	Setback from	Minimum Distance (ft)
1.	Front yard (road) ROW line	_____
2.	Rear, and side parcel boundary	_____
3.	Waterfront yard	_____

- C. Separation Standards
 1. Distance

- a. From Municipalities and other zoning districts: No animal feeding operation or animal waste area shall be located within ___ feet of the corporate limits of a municipality or the boundary of another zoning district.

Comment: Note that this sample separation standard is based on distance from municipal limits and zoning district boundaries, rather than individual uses. The idea behind such an approach is that these boundaries will have been carefully considered during the planning process leading to their adoption. As such, the boundaries will be reliable indicators of the presence of land uses in need of "protection". Such an approach also helps to deflect criticism about individual land uses controlling development of nearby property.

- b. From Existing Uses in an Agriculture Zoning District: No animal feeding operation or animal waste area shall be located within ___ feet of a Residence, School, Park or Church for which a zoning permit had been issued prior to the effective date of this amendment.

Comment: Inclusion of this type of standard could be used to help ensure separation from uses that predate establishment of the new zoning district or new requirements for animal feeding operations. The working of this sample provision is intended to make it clear that separation is only required from uses that were established (or approved) prior to mapping of the new district.

2. Measurements: The separation distances in this section shall be measured from the perimeter of the animal feeding operation or animal waste area lagoon to the nearest referenced boundary or the exterior wall of the principal structure containing the referenced use, whichever applies. In case a use is not contained within a structure, an imaginary perimeter boundary shall be drawn around the referenced use, and measurements shall be taken from that perimeter boundary.

Comment: Separation standards could also be varied by animal species, by size of operation (animal units) or by the types of management practices employed by the facility.

Another approach that has been suggested would be to establish different separation distances to be employed based on whether the animal agriculture use was to be located upwind or downwind of the "protected" district. Jurisdictions choosing to vary separation distances according to prevailing winds should define carefully the terms "upwind" and "downwind", so that separation distance determinations may be made objectively and definitively by the zoning official. The definitions should probably specify the compass directions constituting "upwind" or "downwind" from the animal feeding operation to the "protected" use or district. The compass directions, in turn, should be based upon accurate meteorological information on prevailing winds.

Comment: The following table presents an illustration of how such "differential" standards might work. As discussed above, this type of table, combined with a definition of feedlot types and land uses, could be used to set different separation standards based on any number of considerations, such as size of operation, management practices, species, location relative to prevailing winds, etc. The land use types (I-IV) are intended to represent groupings of similar uses. An alternative to that approach would be to refer to zoning districts, instead of use types.

Feedlot Type	Separation Distance (feet)							
	Upwind Land use Type				Downwind Land Use Type			
	I	II	III	IV	I	II	III	IV
1								
2								
3								

Comment: Some observers have suggested that regulations should include exemption (waiver) provisions to address situations in which the owner of a "protected" use consents to a waiver of the separation distance requirement. This approach is not recommended because such provisions may constitute an unreasonable delegation of the police power. While the approach is not recommended, jurisdictions that wish to pursue the idea should consider use of a recorded odor easement as a condition of exemption. A recorded odor easement represents a good method of ensuring that future owners receive adequate notice of the fact that a previous owner has waived the right to separation. The following sample provision illustrates use of an odor easement in an exemption provision.

- D. The number of animals housed in the Animal Feeding Operation does not:
1. exceed the capacity of the Animal Waste Area based upon the technology and management practices as well as enough acres under direct control of the Animal Feeding Operation for land application of manure at an agronomic rate; or
 2. exceed _____ animal units per _____ acre of spreadable land under direct control of the Animal Feeding Operation, whichever is greater.
- E. The total number of animal units does not exceed _____.