Appendix A, Table 2 to rule 901:10-2-14: Land application restrictions and setbacks

Land Application Restrictions

	~~Staging Areas and~~ Stockpiles ~~(10)~~	~~Surface Application~~ Staging Areas (8)	~~Winter Applications~~ Frozen or Snow Covered Ground (1)	~~Surface~~ Incorporation within 24 Hours OR Direct Injection	Surface Application
Class V wells and sinkholes	300'	300'	300'	100'	300′
Surface Waters of the ~~State~~ State ("SWOTS")(~~7~~6) - **Streams** - **Watercourses** - **Ditches** - **Surface Inlets/Tile Risers/Catch Basins** - **Culverts connected to SWOTS**	300'	~~35' veg. cover, 100' (2)~~100′	~~35' veg. cover,~~ 200' ~~(8)~~	~~35' veg. cover, 100' (2)~~ none	35′ veg. cover -Or- 100′ **(2)**
Surface Waters of the State ("SWOTS")(6) - **Ponds** - **Lakes** - **Marshes** - **Wetlands** - **Springs**	300′	100′ with 35′ veg. cover -Or- 300′	200′	35′ veg. cover -Or- 100′ **(2)**	100′ with 35′ veg. cover -Or- 300′
Grassed Waterways (9)	300′	100′	200′	none	35′
Private and Public Wells	300′	300′	300′	100′	300′
Bedrock	>3' from bedrock	none	none	none	none
Public Surface Drinking Water Intake	1,500'	300'	300'	300'	300′
~~**Springs**~~	~~300'~~	~~300'~~	~~300'~~	~~300'~~	
Neighboring residences	500'	300'	300'	100'	100′
~~**Flooding**~~**, Flood Plains~~, and/~~ Floodways (3)**	do not stockpile	do not ~~apply~~ stage	do not apply	permissible **(3)**	do not apply
Slope (4)	0-6%	~~If >15% see (5)~~ 0-6%	If > 6% see **(1)**	If >15% see **(~~5~~4)**	If >15% see **(4)**
Field Surface Furrows (~~6~~5)	300'	~~35' veg. cover~~ 100' ~~(2) or 35' (9)~~	200'	none	35′ veg. cover, 100′ **(2,7)**
~~**Maximum Application Rates**~~	~~Liquid Manure- Based on Appendix B (AWC Chart) & Appendix F (Most Limiting Nutrient Chart).~~ ~~Solid Manure - Based on Appendix F (Most Limiting Nutrient Chart).~~				

(1) : In accordance with OAC 901:10-2-14(G), prior to all ~~winter~~ frozen or snow-covered surface applications, the CAFF or CLM must have obtained written authorization ~~prior approval~~ from the Ohio Department of Agriculture. Application on frozen and ~~snow~~ snow-covered soil is not recommended. However, if manure application becomes necessary on frozen or ~~snow~~ snow-covered soils, only limited quantities of manure shall be applied to address waste storage limitations until non frozen soils are available for manure application. If frozen or ~~snow~~ snow-covered ground application becomes necessary, applications are to be applied only if ALL criteria are met:

a. Solid manure with less than 50% ~~manure~~ moisture shall be stockpiled at the land application ~~site~~ area in lieu of land application on frozen or snow-covered ground. Solid manure with greater than 50% moisture is limited to 10 tons/acre (as-is). For liquid manure, the application rate is limited to 5,000 gallons/acre.

b. Applications are to be made on land with at least 90% surface residue cover at the time of application (e.g., good quality hay or pasture field, all corn grain residue remaining after harvest, small grain residue cover remaining after harvest). Vegetation or residue shall not be completely covered by ice or snow at the time of application.

c. Manure shall not be applied on more than 20 contiguous acres. Contiguous areas for application are to be separated by a break of at least 200 feet. Utilize those areas for manure application that are the farthest from streams, ditches, waterways, surface water, etc. (areas that present the least runoff potential and are farthest from surface water). Land application areas that are not subsurface drained (tile) are to be prioritized over areas that are subsurface drained.

d. ~~Increase the application setback distance to 200 feet "minimum" from all grassed waterways, surface drainage ditches, streams, water bodies and field surface furrows. This distance may need to be further increased due to local conditions.~~ Setbacks from surface waters and conduits to surface waters (including grassed waterways, roadside ditches, surface drains, surface inlets/catch basins/tile risers, and culverts), shall be a minimum of 200 feet.

e. ~~The rate of application shall not exceed the rates specified in Table 4 – Determining The Most Limiting Manure Application Rates for winter application.~~ Additional winter application criteria for fields with significant slopes more than 6% - Manure shall be applied in alternating strips 60 to 200 feet wide generally on the contour, or in the case of contour strips on the alternating strips.

(2) : Either a 35' wide vegetative buffer strip must be present or a total setback of 100' must be maintained. ~~As a compliance alternative, the concentrated animal feeding operation may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the one hundred foot setback or a thirty-five foot vegetative buffer. Buffer strip is defined in OAC 901:10-1-01.~~

(3) : ~~No applications during expected flooding season as reported in Appendix A, Table 1.~~ Manure applications in flood plains or floodways, as those terms are defined in OAC 901:10-1-01, shall be injected or incorporated within 24 hours. Manure shall not be land applied on soils that are prone to flooding as listed in Appendix A, Table 1 to rule 901:10-2-14 of the Administrative Code during the periods when flooding is expected unless the manure is incorporated within 24 hours, directly injected, or applied to a growing crop.

(4) ~~: Must have <5 ton/ac yearly average soil loss to perform surface manure applications.~~

(~~5~~4): Manures are not to be applied to cropland over 15% slope or to pastures/hayland over 20% slope unless ONE of the following precautions are taken:

a. Immediate incorporation or injection with operations done on the contour, UNLESS the field has 80% ground cover (residue or canopy).
b. Applications are timed during periods of lower runoff and/or rainfall (May 20th – October 15th).
c. Split applications are made (separated by rainfall events) with single applications not exceeding 10 wet tons/ac or 5,000 gal/ac.
d. The field is established and managed in contour strips with alternated strips in grass or legume.

(~~6~~5): If manure is incorporated, injected, or applied to a growing crop, applications can be completed through field surface furrows.

(~~7~~6): ~~Refer to OAC 901:10-1-01 for the definition of~~ "Surface waters of the state" Means all streams, lakes, ponds, marshes, watercourses, wetlands, springs, drainage systems, and other bodies or accumulations of surface water, natural or artificial, that are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters that do not combine or effect a junction with natural surface or underground waters.

~~**(8)**: The first setback refers to a vegetative buffer strip that must be maintained while the second refers to the total setback distance. Buffer strip is defined in OAC 901:10-1-01.~~

(~~9~~7): A 35' vegetative buffer could include a growing crop or growing cover crop if approved by the Director ~~based on~~ prior to manure application ~~submittal of a compliance alternative for the specific land application areas, in accordance with the OAC 901:10-2-14(C)(3)~~.

(~~10~~8): A staging area(s) is a site used for placement of solid manure ~~or transferring of liquid manure~~ to facilitate land application. Any solid manure that is staged for more than 15 days will be considered a stockpile. Staging areas and stockpiles shall not discharge to waters of the State.

(9): Setbacks from Grassed Waterways are measured from the edge of the waterway.

Source: USDA-NCRS (~~2012~~2020). Field Office Technical Guide – Conservation Practice Standard 590, Columbus, Ohio.