Appendix A to rule 901:10-2-14: How to Use the Appendices to this Rule.

Refer to Appendix A, Tables 1 and 2 - Soils Prone to Flooding through Appendix F, Most Limiting Manure Application Rates of rule 901:10-2-14 of the OAC.)

1. Determine if the site has soils that are prone to flooding and when the expected flooding seasons are (Appendix A, Table 1). Note that applications can only be made to soils prone to flooding at times outside the predicted flooding season. All applications to soils prone to flooding must be incorporated within 24 hours and must follow the setbacks in Appendix A, Table 2.

2. Determine if a solid or liquid manure application will be performed. Determine if solid manure will be stockpiled at the land application site. Stockpiles must meet the setbacks described in column 1 of Appendix A Table 2.

3. For liquid manure applications, follow Appendix B, Available Water Capacity Chart, and Appendix F, Most Limiting Manure Application Rates Chart (Table 1 - tiled fields, Table 2 - non-tiled fields). For solid manures, follow Appendix F, Most Limiting Manure Application Rates Chart.

4. Determine the nutrient removal for the expected cropping sequence using Appendix C, Tables 1-3. Determine residual nitrogen credits for the expected cropping sequence using Appendix C, Table 4.

5. Determine the nitrogen leaching potential of the field based on Appendix C, Table 5, Nitrogen Leaching Assessment Procedure. Note that all tiled fields have a high nitrogen leaching potential. High nitrogen leaching potential fields must have application rates less than or equal to 50 lb/ac as applied nitrogen (calculated by adding NH4-N to 1/3 Organic N) from June - October 1st unless the field has a cover crop planted.

6. Use the current manure analysis and the relevant sections of Appendix C Tables 6-7 through Appendix D, Tables 1-5 to determine the amount of manure nutrients available for crop production.

7. Use Appendix E, Table 1 (P-Index) if the Bray P1or equivalent value of the soil test is over 150 ppm. P-Index may only be relied upon for a transitional period of time to allow the owner or operator an opportunity to find other fields or other methods to distribute nutrients from of the facility in order to achieve less than 150 ppm Bray P1 soil test method.

8. Use Appendix F, Most Limiting Manure Application Rates Chart, Nitrogen, P_2O_5, K_2O, Rate (tons or gallons per acre), or Available Water Capacity to determine the application rate. The selected application rate must be the most restrictive of the five *"Limiti*ng Application Rate Criteria*"* for each Field Situation & Time of Year.

Other Notes:

9. When using Appendix F, although not recommended, Phosphate manure application rates can be made between 250-500lb/ac/yr in cases where liquid manure exceeds 60 lbs. P_2O_5 per 1000 gallons or solid manure that exceed 80 lbs. P_2O_5 per ton. The following criteria also apply: manure must be incorporated within 24 hours and no applications can be made on either frozen or snow covered ground or fields with soil tests over 100 ppm Bray P1; soil tests less than 40 ppm Bray P1 shall have no further P additions for 3 years; soil tests between 40 – 100 ppm Bray P1 shall have no further additions of P for 5 years; no other limiting criteria can be violated.

10. When using legumes as a nitrogen removal source, the maximum legume nitrogen removal must be less than or equal to 150 lbs./ac.

11. When applying liquid manure to tiled fields, the following criteria must be followed (except for growing crops):

    11a. Applications must be less than or equal to 0.5" or 13,576 gal/ac.

11b. Use a tool (AERWAY tool or similar tool) that can disrupt/close (using horizontal fracturing) the preferential flow paths in the soil, or till the surface of the soil 3-5" deep to a seedbed condition to soak up the liquid manure and keep it out of preferential flow channels.

11c. If injection is used, it should only be deep enough to cover the manure with soil. Till the soil at least 3" below the depth of injection prior to application. Tillage prior to application will be considered incorporation of the manure.

11d. The outlets must be monitored before, during, and after application AND provisions planned to plug the tile or capture the tile flow if liquid manure reaches the tile outlets. If No-till or pastures are used for applications, tiles must be plugged.

12. If manure is to be applied on frozen or snow covered ground, the field must have at least 90% surface residue cover (e.g. good quality hay or pasture field, all corn grain residue). For applications to or frozen or snow covered ground, manure shall not be applied on more than 20 contiguous acres. Contiguous areas for application are to be separated by a break from streams, ditches, waterways, surface water, etc. (areas that present the least runoff potential and are furthest from surface water The setbacks in column 3 should be followed. Prior approval must be obtained from the ODA, Livestock Environmental Permitting Program before frozen or snow/ice covered ground surface manure applications. If manure can be incorporated within 24 hours on frozen ground, approval from ODA, Livestock Environmental Permitting Program is not required.

13. For surface manure applications, follow the setbacks in column 2. For incorporation within 24 hours or injection, follow the setbacks in column 4.