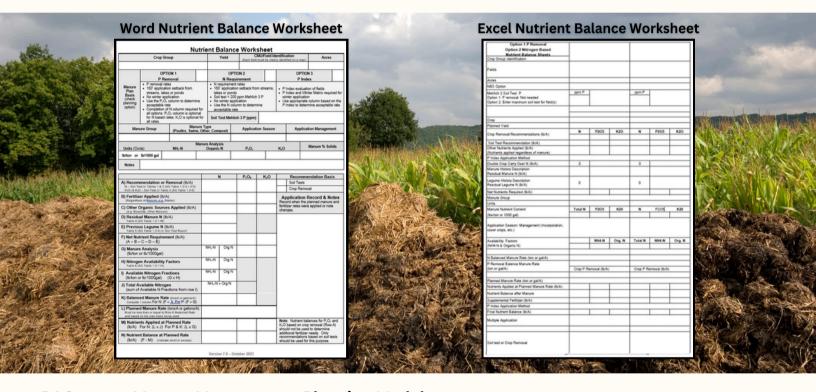
## Calculating Manure Application Rates When Planning With the Manure Management Plan Workbook

When using the Manure Management Plan Workbook to complete a Manure Management Plan, you are required to include the manure application rates for the operation. There are multiple methods to calculate manure application rates.

## **Nutrient Balance Sheets**

A Nutrient Balance Sheet is a tool that can be used to determine the most agronomically appropriate manure application rates. Nutrient Balance Sheets or the PAOneStop Manure Management Planning Modules should be used by any operation that applies commercial fertilizers, biosolids, and food processing residuals.

There are two tools available to calculate manure application rates using Nutrient Balance Sheets: The Word version and the Excel version. Both are available at <a href="https://extension.psu.edu/programs/nutrient-management/tools/sheet">https://extension.psu.edu/programs/nutrient-management/tools/sheet</a>. The Word version requires the planner to complete calculations similar to filling out a tax form by hand. The excel version completes the calculations for the planner if the inputs are entered correctly.



## **PAOnestop Manure Management Planning Module**

As an alternative, the planner may choose to complete the full Manure Management Plan Workbook and manure calculations using the PAOneStop Manure Management Plan Module which can be found at <a href="https://paonestop.psu.edu">https://paonestop.psu.edu</a>.

## **Manure Application Rate Tables**

Operations that do not utilize commercial fertilizers, biosolids, or food processing residuals, are growing the crops listed, and applying the manure types listed may utilize the phosphorus-based manure application rate tables of Appendix 1 of the Land Application of Manure Technical Guidance Manual which can be found on DEP's eLibraray at <a href="https://greenport.pa.gov/elibrary/GetFolder?Folder!D=1]14203">https://greenport.pa.gov/elibrary/GetFolder?Folder!D=1]14203</a>. Operations that wish to apply nutrients beyond the phosphorus removal rate, on crops not listed in Appendix 1, or utilize manure types not listed in Appendix 1 must utilize Nutrient Balance Sheets or the PAOneStop Manure Management Planning Module to determine the planned application rate of manure.