

Appendix 9 Operation Maps

Nutrient Management Plans (NMP) are required to include a map(s) of the operation that shall include a topographic map drawn to scale identifying the lands included in the agricultural operation. A topographic map represents the exact physical features of a place or region on a map. Section 83.281(a)(5) of the regulations require the watershed(s) in which the lands included in the NMP are located and the existence of any special protection waters as identified in the Department of Environmental Protection's Chapter 93. The topographical map will give you all the necessary information to look up the required information regarding Watershed and Special Protection Waters. A listing of Special Protection Waters is revised on a continuing basis and is available through an interactive DEP map program, eMap, at: <http://www.emappa.dep.state.pa.us/emappa/viewer.htm>. For additional information on using the DEP eMap website tool refer to "Using eMAP to Identify Special Protection Watersheds" posted on the PA Nutrient Management Program website (<http://panutrientmgmt.cas.psu.edu/>) under the Planning Tools and Resources section.

Copies of the relevant areas of the topographic maps can be obtained from the local conservation district or NRCS office.

Adding 150 foot Phosphorus Index (P Index) lines to the topographic or soils map can be helpful in determining if a crop management unit (CMU) is closer than 150 feet to a receiving body of water, as measured in the direction of water flow from the lower edge of the CMU. If the CMU is less than 150 feet (as measured in the direction of water flow) then Part A of the P-Index must be used (see Appendix 5). Contributing Distance lines used in the P Index lines can be helpful on the topographic or soils map but are not required..

Section 83.281(b)(4) of the regulations require the identification of all soil types and slopes on the agricultural operation. A copy of **the NRCS soil survey map** can be used as the base map for this mapping requirement. The map shall include a soil legend which explains the soil types and slope designations on the map. The NRCS soil survey map is not required to be used in the NMP. Soils and slope information needs to be provided at least to the detail of indicating the soil type and slope for each individual field strip or field. The soil types and slopes are required information when determining the maximum infiltration rates for soils proposed to receive spray irrigation and also for estimating typical capabilities of major Pennsylvania soils; such as typical ratings of yields based on soil type.

The Operator Management Map is to be included in the NMP Summary and must include field identification, acreage and boundaries, manure application setback areas and buffers and associated landscape features, location of existing and proposed structural BMPs (including manure storage facilities), location of existing or proposed emergency manure stacking areas and in-field manure stacking areas, and road names adjacent to or within the operation. All features on the map must be clearly identified

and include a legend for setback areas and other features (see NMP Summary and Notes).

Again, the Operator Management Map is to be included in the NMP Summary Section of the submitted NMP as an easy reference for setbacks and other features on the operation.